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WEALTH FOR WELFARE

WEALTH FOR WELFARE

BY
H. W. FOSTER

AND
E. V. BACON

FOREWORD BY
DONALD TYERMAN

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FOREWORD

I HAVE seen this book grow since it was a deep-set idea, unthought out, in the minds of two unpractised authors. Both are men of wide and varied experience. Neither is a doctrinaire, a theorist or a politician. Both have derived their views on the future of economic development from facts as they have known and studied them. It is a prime virtue of this book, as I see it, that it is rooted in practical evidence.

The book was projected before the war. Its completion was an act of faith on the part of two busy war workers, one now in the Army, the other now on Government service. If some of its conclusions resemble views on reconstruction which have lately become familiar in high quarters, this is a tribute to the authors' shrewdness and foresight. There has been no plagiarism or imitation. All the conclusions have sprung logically from the facts as the authors have seen and collated them — which is at once the strength and, admittedly, the limitation of the programme they set out.

They have refused to go beyond their evidence. I do not agree with all they say. But I do agree with the opinion of Sir George Schuster, who has read the book in manuscript and has kindly given permission for this quotation :

“ If I have understood the basic ideas correctly, they are : that everything must be founded on a better system of home-produced subsistence ; after the first steps to develop this, then as a secondary stage comes the development of export money crops and, as a third stage, the development of secondary industries ; projects on these lines must be undertaken with the courage to look ahead for a long period of years and expect a return in indirect rather than direct ways ; I agree with these basic ideas.”

These basic ideas seem to me too, as far as they go, to be excellent common sense and, backed as they are by facts and figures, most valuable at a time when the ways and means of economic development, especially in the backward areas of the world, present a historic challenge and opportunity.

DONALD TYERMAN

PREFACE

WE began to discuss the lines of this book in July 1939, one of us being at Château de Ferrals, near Carcassonne, and the other in England. The book was ready in the rough before France fell. Since then, in the small leisure allowed by war work, it has undergone severe revision. Practically the whole of the discussion which collaboration involves has unavoidably been conducted by correspondence, and to this, despite painstaking revision, may be attributed many of the blemishes of which we are conscious. The obligations of our respective duties, preventing access to material for reference, and the isolation latterly of many books and papers in South France, are responsible for others. We have tried to give a practical turn to the discussion of our subject, and, if we provoke criticism and the thought that leads to action, we shall account it success.

The design of the book betrays our mode of approach, — a kind of inductive method, leading from the particular to the general. But any reader who prefers to invert the process should read Chapter VI first.

We are deeply indebted to many friends for advice and criticism, and most specially to Mr. D. Tyerman, the acting editor of *The Economist*, for his use of the Blue Pencil, his constant encouragement and his Foreword.

H. W. FOSTER

E. V. BACON

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MAPS

BRITISH HONDURAS	<i>End of vol.</i>
EAST AFRICA	" "

INTRODUCTION

It is easy enough to reconstruct the world more to our liking from the depths of an armchair before the fire. Sometimes, however, and especially in times of difficulty, the average citizen may find it not only useful, but even incumbent upon him to weigh the state of the world's affairs. What are the facts? What should be done? How should the problem be tackled?

Prior to 1914 it was tacitly assumed that civilisation would progress steadily along familiar lines towards increased liberty, — fuller democracy, — greater wealth and comfort, and, gradually, towards a better control over such forces of disorder as still existed in the world. Changes, however, imperceptible and unnoted at the time, had already begun, when the Great War shattered this illusion of comfortable progress, leaving in its wake a legacy of disorder and confusion which has culminated in a renewal of war.

Political liberation consequent upon the French Revolution had lost much of its impetus. The phenomenal growth in world population following upon an enlargement in the horizon of knowledge, the coming of the machines and a great increase in riches and in medical knowledge, showed signs of halting. The rapid opening-up of new countries overseas, particularly in America and Africa, had largely ceased with a failure in the supply of new continents to discover.

True, new inventions were coming at an ever-increasing rate, but they had not got that quality of momentous change possessed by the first discovery of the uses of mechanical power.

The outbreak of the Great War was in many respects a symptom of the maladjustment which existed between political, economic and religious institutions; and one of its effects was to release powerful solvents in the relations between man and man. Governments came into existence which ruthlessly moulded men into the illusory model of a state machine, and in furtherance of their social aims did not hesitate to violate the sanctity of human life. The war, moreover, upset the accustomed routine of international trade, while simultaneously the pheno-

menon appeared of a decreasing rate of growth in population in the industrial countries with its wide social and economic repercussions.

But the hand of the rulers of free peoples had lost its cunning. The peace which followed the fleeting victory was lost, and this led directly through confusion worse confounded to a renewal of war. The struggle is now joined between an ideal of Government, on the one hand, which ignores human values in its search for power, — power for its own sake and at the expense even of its own citizens, — and, on the other, an ideal which regards Government as existing solely to serve the individual.

Is this war to set the seal upon human failure, or can we rescue the lamp of progress from the darkness that threatens to overwhelm it? Are we to believe that our present civilisation is past its prime and that nothing now remains but the spectacle of slow decay? So some think. But they fail to take account of one very significant difference between our present civilisation and those others which have perished in the past. For the first time man has learned the use and the possibilities of organised research, of careful, patient, scientific observation of the causes of the world's difficulties. He can now examine the past, see where failure has occurred and why, and so hope to learn how success may be achieved in the future. He knows; he can control and plan.

We must devise a better way of life; for it is impossible to replace things outworn. We cannot now go back to the old "pre-war" world, nor should we wish to do so. There is a great impulse to make things new, — to see the phoenix of new life rise from the ashes of destruction.

How is the power of this new impulse to be developed? We believe that this might be achieved through a concerted attack upon the poverty of the world, and that the fundamental means to this achievement is a wide and organised development of the world's resources on a scale hitherto unimagined.

This book sets out, as a first step, to see what can be done by Great Britain to develop her Colonial estate, in the first place, in the interests of the inhabitants of the Colonies, and, secondly, in those of the world at large; and further, it suggests a method for carrying out this purpose. No community, however, any more

than any man, can live unto itself alone, and the argument leads naturally to a brief reference to similar development in Great Britain, the British Commonwealth and the world at large, where amongst other problems, national and regional, that of Europe will bulk largely. For one thing is abundantly clear, and that is that the countries and peoples of the world are, under modern conditions, interdependent.

We are unable, owing to war work, to give examples of methods which might be adopted to attack the great problems before industrial countries and at home. Hence we confine ourselves to some special cases which seem to offer a clear opportunity for employing the methods which we advocate for the Colonies. The work of development on the scale contemplated, with its aim of raising standards of living, will need a great cooperative effort ; and there is reason to believe that the necessity for this is becoming widely recognised. The historic "lend-lease" gesture proves it, and Russia, in the Treaty of London, has subscribed to the doctrine. Means are in fact now being taken to secure cooperation in the immediate post-war transitional period. The important thing, however, is that these means should be devised with an eye to the long term. To raise standards of living in the world effectively will need a sustained effort, and the foundations of a long-term organisation to promote world welfare must be laid, not in the future, but now. This book seeks to indicate lines along which this continuity of effort might produce the desired results.

How, then, are we to set about the business ? Actually we must recognise that no mere re-distribution of what is already produced will suffice ; vastly greater production is required before a reasonable standard of living can be provided, even for the people of our own land, let alone the millions eking out miserably a subsistence in other lands. The first material antidote to the poison of poverty is food, followed by housing, clothing and the like ; and that is why, in our discussion of the problem of poverty, we believe that the right point of attack is agriculture in the broadest sense. Agriculture is the fundament of the economy ; and from its proper activation an impulse will spread upwards through every layer of the economic structure, acting and reacting for the welfare of the world.

The pages which follow are designed to show a line of thought which to two ordinary men seems to offer some possibility of practical and constructive action. First we try to show what, in our opinion, should be the theoretical aims of Government in our time. We then make an attempt to reduce this theory to practice, and to devise an *£ s d* method whereby some progress could be made towards the desired end. We work out in detail a typical case where the principles of organised development could be realised in our Colonial Empire, and try to show how logically the idea could be applied in every region of the world, given cooperation between men and nations "of goodwill". And there is evidence of this goodwill among our American friends in a series of remarkable speeches by members of the American Administration following upon the "Atlantic Charter" and the Mutual Aid Agreement.

CHAPTER I

THE GROWTH OF AN IDEA

A. GENERAL CONSIDERATIONS

WE are not concerned here to discuss the problems of peace and security. We must assume that the politicians and their military advisers, whose business they are, are capable of solving them. Our purpose is to consider the economic problems that underlie so much of the world's unrest and to make some suggestions particularly along practical lines for dealing with them. The political background is, of course, all-important ; but we must content ourselves with one or two very general observations.

We think it is important to establish the view that the State as the expression of civilised government exists to serve the people in their individual and collective capacities, and that no government can be considered civilised which regards the people as existing to serve the State. The supreme duty of the State is to raise the standard of life. It follows that freedom of person and freedom of thought and expression are essential.

The aim of the economic system must be the material welfare of the individual ; and, while that is not in itself the sole aim of politics, we regard it as an essential pre-condition of all progress. Throughout history, the State has tended to regard its duty on the economic side as restrictive, — "Thou shalt not" rather than "Thou shouldst". Now, however, economic change, accompanied — where not actually caused — by amazing technological developments, requires that the State should intervene positively in constructive economic development. We shall suggest that this business of development can be better carried on by an authority distinct from that concerned with the routine of administration.

Thus the State needs not only a new outlook, but also new equipment. It must, first, have a systematised body of information based on research and experiment ; at present these activities are dispersed among an amazing number of different bodies.

Secondly, the State must establish the type of organisation best calculated to give effect to the conclusions reached in the light of this information. There are three aims which any such organisation must have ; — technical efficiency, social equity and structural elasticity.

By technical efficiency we mean, on the negative side, the progressive elimination of all forms of waste of resources, of effort, or of time. On the positive side, we must aim at securing an increase in the average productivity per worker ; we must place our emphasis on increased production. Finally, it is important for efficiency that the formation of new capital for investment should proceed at an increasing but a steady rate.

By social equity we mean the necessity, if democracy is to function efficiently on the economic side, of ensuring that every individual has real equality of opportunity ; if this is not so, there is waste. It is precisely because of the infinite inequality of individuals that equality of opportunity is so essential, for not otherwise can the varying capacities of individuals be developed to render the maximum service to the community. There are elements in the law of inheritance which definitely obstruct a more equitable — *ex hypothesi* we reject the term “ equal ” — distribution of wealth. Rapid strides have been made in recent years in promoting equality of opportunity ; but, if the community as a whole is to get the best out of every individual, the process must go a great deal further.

The term “ structural elasticity ” is intended to cover all measures calculated to correct economic maladjustments and frictions. The problem of ensuring greater regularity in the working of the economic machine, in the production of capital goods, in employment and in trade is the obvious illustration. The problem of how much or how little State control will have to be introduced is another ; the distribution and the movement of population, again, are plainly factors which can make for disequilibrium. The fundamental problem, and the primary theme of this study, is the precise form which the process of planned and directed economic development should take.

The first need, as we see it, is to start right in with a determined effort to raise standards of living and to set about finding

practical means of *doing something* about it. We think that the effective point of attack is agriculture, and this is an international question. The development of technology in transport and in agriculture has made it so. The geographical distribution of natural resources makes the nations interdependent. But, if we can set our own house in order at home and in our Colonies, we can provide an example. It would be a missionary one ; its basis would be the organisation of research and experiment.

B. AIMS

The relatively high standards of living reached by certain classes in certain countries might lead the average man to ask whether the raising of living standards is really such an urgent matter. But do most of us realise that the great majority of mankind lives in poverty, often dire poverty and — in some cases — in conditions akin to those of the beasts ?

In the United States where the standard of living is higher than in any other country, there are elements in the population whose standard, as Waite and Cassady put it, does not reach the " minimum levels below which the State has an obligation to see that no one falls ".¹ The same authors give certain international comparisons :

(1) Table 14. Purchasing power of workers in occupations in various world cities (October 1st, 1926) : ²

(London = 100)

Philadelphia.	. 177	Berlin . . .	61
Sydney . . .	137	Warsaw . . .	45
Copenhagen .	111	Rome . . .	43

(2) (p. 69). Table 15. Indices of real income in various countries : ³

¹ Waite and Cassady, *The Consumer and the Economic Order*. (McGraw-Hill.)

² Quoted from *Report on Standard of Living of Workers in Various Countries*. I.L.O., C.E.I. 26, p. 29. (Geneva, 1926.)

³ Quoted from "Measurement of Relative National Standards of Living". An estimate by M. K. Bennett, *Quarterly Journal of Economics*, vol. 51, p. 317, Feb. 1937.

Country	General Index	Country	General Index
U.S.A. . . .	166	Germany . . .	110
United Kingdom . . .	135	Norway . . .	107
Denmark . . .	130	France . . .	106
Switzerland . . .	125	Finland . . .	50
Holland . . .	118	Italy . . .	49
Belgium . . .	118	Spain . . .	48
Sweden . . .	110	Portugal . . .	28

(3) (p. 225). Table 43. *Per capita* income estimates for various countries : ¹

Country	Year	<i>Per Capita</i> Income in Current Dollars	<i>Per Capita</i> Income in 1913 Dollars
U.S.A.	1928	749	541
United Kingdom . . .	1928	411	293
Germany	1928	279	199
France	1928	192	188
Italy	1928	121	96
Russia	1929	107	62
Japan	1925	89	53

Whatever the limitations of such calculations, the figures tell their own story. In the I.L.O. Report on the Workers' Standard of Living (see note p. 3) we read on p. 100 :

" . . the prevalence of low standards of living . . . the main reason for low living standards in most parts of the world is poverty. . . ."

In the Report on Nutrition in the Colonial Empire ² we read (Cmd. 6050, chap. ii, para. 14) :

" But when all is said and done we cannot get away from the fact that the present economic level is, broadly speaking, not high enough. The problem is fundamentally an economic problem. Malnutrition will never be cured until the peoples of the Colonial Empire command far greater resources than they do at present."

In the United Kingdom we have a general standard of living close to that of the United States, but the position is far from satisfactory. In an unpublished memorandum prepared in the summer of 1939 the following passage occurs :

¹ Quoted from article on " National Income ", in *Encyclopedia of the Social Sciences*, by S. Kurznets, vol. ii, p. 206.

² Cmd. 6050 and 6051, 1939.

"A general conclusion about the standard of living can be drawn from two inquiries on a comparable basis for the pre-war and post-war periods, made by Professor Bowley in 1913 and 1924 in five provincial centres and the London Survey, repeating Charles Booth's investigations in the nineties. The rough conclusion appears to be that, whereas a third of the urban population was below the defined poverty line a generation ago, less than a tenth is in that condition today. But, while there may have been improvement, the state of national nutrition is not a matter for complacency. . . . Two or three years ago Sir John Orr calculated that over 20 million people lacked completely adequate nutrition, and a year ago Mr. Rowntree made a revised estimate, which suggested that 43 per cent of male adult workers could not provide themselves and their families with an *adequate* dietary. By inadequacy is meant either absolute insufficiency due to low income, or lack of one or more vital elements of nutrition. The published results¹ of a recent inquiry confirm these conclusions and indicate that some 8 million people cannot afford enough food and that a further 12 to 22 millions subsist on inadequate diets."

The countries in Eastern Europe, discussed by Doreen Warriner,² come as something of a shock :

(1) (p. 87) :

"Of the total peasant population of Eastern Europe of 60 millions, probably about one-fourth do not produce enough to satisfy their need for food, in the sense of bread."

(2) (p. 93). In Southern Croatia :

"The typical house there has two rooms ; the kitchen, which has no window, only a door in the opposite walls leading outside, and an inner room with a tiny window and no floor. In the poorest houses the cattle are housed in the same room."

(3) (p. 94) :

"In the eastern frontier districts of Poland, where conditions are typical for White Russia, housing is primitive and sordid."

(4) (p. 95) :

"The worst housing conditions in Europe, in view of the good level of agricultural technique, can be seen in the villages inhabited by the agricultural proletariat in Northern Hungary, where the labourers live in caves ; their earnings have long been too low to build new houses ; they have dug holes in the sandstone rock, bricked

¹ Sir W. Crawford and H. Bradley, *The People's Food*. (Heinemann.)

² Doreen Warriner, *Economics of Peasant Farming*. (Oxford University Press.)

up the entrance and made cave-dwellings ; families of eight and nine children can be found living in degradation even greater than in the poorest eastern parts of Poland."

In India and China hundreds of millions are quite inadequately fed, clothed and housed. To all this permanent want has now been added the terrible devastation of war.

In circumstances such as these, can it really be contended that the apparent surplus of raw materials and products, particularly agricultural produce, ever represents a "glut" of unwanted goods? If the poor millions had the power to purchase, and knew how to use the products, there would be not a surplus but a deficiency. The only way in which people can become wealthier is by increasing their own production of goods and services. As Dr. Salazar, the reorganiser of Portugal, has said : "It is to the world's interest to compensate for the wastage of war by means of more work, more abundant production, and greater exchange of wealth".¹

The greatest single obstacle to raising the standard of living of the masses is political instability. Before real progress can be made, the Hitlers of this world must be eliminated. Given guaranteed peace and security, the fact still remains that the farmer, on whom in the first instance depends the world's standard of living, is faced with the periodic appearance of world-wide depression in agricultural prices. The present war and its aftermath may temporarily stimulate demand, but the tendency to periodic depression will probably persist, unless steps are taken to counteract it. This tendency has been recognised by Governments, — those of Great Britain and the United States,² for instance, — as dangerous to the whole structure of the agricultural industry. In this country we are now committed to a system of higher wages and costs in agriculture, and also higher prices. But it is very necessary to take all possible measures to prevent any rise in agricultural costs and prices from increasing the cost of foodstuffs to the workers in the cities more than is absolutely unavoidable. This can only be done by increasing the efficiency of agriculture, so that more goods can be produced by less expenditure of labour. This involves the application of capital

¹ *The Times*, Leading Article, May 7, 1940.

² *The Times*, Nov. 1, 1941. Mr. Sumner Welles, quoted in a Special Article.

and the fruits of scientific research to the land, and may even, conceivably, require a revision of our system of land tenure.

Attention must be given, not only to the quantity, but also to the quality of the food produced. Even if present production could be increased *and* could be purchased and consumed by the generality of mankind, there remains the highly important question of the nutritional value of different foods. There are two kinds of inadequate diet, — that which, though enough in quantity, is wrongly balanced, as well as that which is actually insufficient. In many countries, our own for instance, the production of the “protective foods” should be largely increased. Not only are they important nutritionally, but in such countries they can be produced efficiently. In Europe, faced with the development of the large, overseas cereal areas, the production of these grains has come increasingly to require protection, culminating, since the depression, in a fantastic congeries of restrictive devices. The whole pitiful story, branded as it is with the curse of national politics, is a luminous argument in favour of the principle that, as far as possible, goods should be made and things grown where they can be produced with the greatest efficiency.

If waste is to be avoided, agricultural production must be efficient. It is not enough that each type of farming should be suited to the locality where it is carried out. Care is needed to ensure that marginal land (*i.e.* land which in a good year still only just pays for the cost of working it) is not ploughed up. Otherwise, land — which would have given permanent good returns as pasture — may be blown or washed away through bad farming practice. The soil of the good agricultural land must be conserved. Mechanisation in due measure, which needs capital, should be introduced to prevent the overloading of the land with population.

These are just some of the general conditions required to restore health to agriculture. But something more is needed. In 1938 the League of Nations published an admirable Memorandum by Mr. N. F. Hall on measures designed to raise the standard of living. His suggestions are simple and feasible. He points out how small improvements in communications and in marketing arrangements can stimulate a rise in the peasant's

income, thus not only increasing his purchasing power, but initiating the provision of capital. With the teaching of better methods and the application of science and capital, production would not only increase but also become more efficient. Mr. Hall points out (p. 66) that —

“Improved equipment for producing and handling agricultural goods will create an increased world demand for industrial raw materials of all types. This demand will be intensified as the increased incomes of agricultural producers are expended upon improved clothing, better house equipment and in a variety of other directions. The increased volume of trade in raw materials will require great increases in capital equipment, shipping, transport facilities and the like.”

C. PRACTICAL CONSIDERATIONS

In pursuance of this idea of building up purchasing power from the very bottom by production within the community, an example is available which shows more or less how the process can work.

On the eastern borders of Uganda, on the slopes of Mount Elgon, there lives a tribe called the Wagishu. In 1919 they were absolutely uncivilised, their country quite undeveloped. Roads or railways did not exist and all transport was by head portage to Lake Victoria. There was virtually no trade. The people lived in filthy huts, the men clothed in untanned skins, smelly and covered with lice, the women usually in a grass kirtle round the waist. A primitive subsistence agriculture provided them with their food, always insufficient, and, whenever the harvest was less than normal, serious privation if not actual starvation resulted.

After the last war, uninhabited lands in Kenya Colony on the borders were thrown open to soldier settlers, and active development was started. A railway was under construction which reached the European area in 1925, and was then immediately pushed on through the Wagishu country to the centre of Uganda. Branch lines were built, roads were constructed, and today there is an excellent system of all-weather roads which bring all parts of the country within easy reach of rail.

The men of the Wagishu started to go out to work, and

provided large numbers of labourers for the European farmers and for the railway and road construction. The Wagishu thus for the first time came into close contact with civilisation and its ways. The first change that we noticed was a tendency to abandon the skin for a disused gunny bag worn as a smock, with holes cut in the bottom and sides for the head and arms. Next, they began to buy lengths of unbleached cotton cloth (usually Japanese manufacture — though universally known as “Americani”), or a cheap blanket draped over the shoulder and around the body from a knot. Cheap “Americani” shirts and shorts were soon being manufactured by Indian tailors which sold at from one shilling upwards. These were also being imported in large quantities for the use of other tribes who had started sooner in the race for clothing. The women had now begun to wear one-piece cotton smocks.

While this was going on, the Uganda Government was very actively encouraging the native to grow more foodstuffs for himself — for instance, extending the cultivation of bananas to their territory ; cotton was introduced as a cash crop, and later coffee, for which this country seems specially suited. Markets were opened, schools and medical services were being extended, and agricultural demonstration plots were started at many of the village headquarters. The Wagishu were thus not only earning money in Kenya, where they would usually work for a few months and then return home, but they were developing their own production on their own lands. While the men were away at work earning wages, the cultivation was carried on by the women, the old men and the children. Peace had enabled the earning of cash wages to be substituted for the old-time work of war and guard for the men. Efforts are constantly being made to introduce cheap ox ploughs, but their adoption has been slow. The women often object, as they prefer to do the work of cultivation themselves and keep their cattle as their ornaments and the outward and visible sign of wealth.

Today, after twenty years have passed, the changes have been immense. There are two considerable towns, railway stations, garages, shops, hotels, an aerodrome, all the appurtenances of civilisation can be seen. Gold was found not far from the district in 1934 by the Uganda Geological Survey, and it seems as if a

considerable mining industry may grow up.

The native has now abandoned his "Americani" kilt and is more and more demanding better khaki shorts and coloured clothing. European white drill suits, grey flannel trousers, etc., are common. The bicycle, dark spectacles and a sola topi are other common outward signs of prosperity. The women are dressed in bright prints and some even in cheaper velvets. Cheap beds are often used and blankets universally, and soap has come into use. The native has also begun to change his diet, and this now includes maize meal, tinned milk, tea, sugar and cigarettes. A very considerable trade has been built up in the short space of twenty years.

It is important to note that in this case the initial impetus was given by the European farming community and the construction of the railways. It was this European development which enabled the native to begin his first formation of capital in the form of a few shillings saved from his wages and a gunny bag (the latter often stolen). This initial impetus was ably seconded and developed by the Uganda Government, who made a great effort to open up this backward district and to introduce new food and cash crops. Rail and road communications provided the necessary means for continuing the work. Incidentally, Uganda is an excellent example of how the advent of the motor car has revolutionised the possibilities of rapid and cheap development of native countries where the available trade is insufficient to justify the cost of railway construction.

The benefit to the trade of the world of such work needs no emphasis. It is often remarkably interesting to study how this trade expands. In the beginning we find the gunny bag, which is supplied by the jute mills of India. Next, the cheap blanket from various sources, and the "Americani" garments — chiefly from Japan. Then the ever-expanding circle brings demands for khaki cloth from Lancashire and from Japan. Motor transport brings us to Canada, the United States and the United Kingdom. It is not a little suggestive to observe how the profit reaped by Japan in providing the cheapest cloths and cheapest shoes turns — in the next few years — to the benefit of the whole world. When the native starts his progress, the shoddiest goods, which are all he can buy at first, start a demand for other things and he

begins to have ever greater wants. In how many cases has the initial purchase of one shilling's worth of cotton cloth from Japan, by a native boy earning his first wages, led in ten or fifteen years' time to the purchase of khaki shorts, shirt and tie, bright red or green stockings, dark spectacles, a sports coat and topi, a gleaming bicycle covered with lamps, bells and other ornaments — costing probably five pounds or more — or even to that supreme joy of joys — a motor bicycle !

This kind of thing is, undoubtedly, what we want to see. By the native's welfare, moreover, we benefit our trade. It is a small but striking example of how, once the appropriate stimulus is given, development and the raising of living standards can take place. By systematic thought and practical organisation, the process could be extended to countries, regions and indeed the whole world. For development work such as this, based on a healthy agriculture, the opportunity is immense. We shall immediately meet with the objection that there is already too much agricultural productive capacity in the world ; that there is, for instance, too much cotton and coffee in the world. It may be admitted that some agricultural products, notably wheat, cotton and coffee, have seemed at times to be in gross over-supply. It is most important in considering any new development that great care should be taken to secure a balance of supply between various goods : too much emphasis must not be laid on one crop. Greater attention must be paid to the organisation of production and to cooperation between the various sources of supply, to ensure that over-expansion in certain lines does not take place. It may be worth while, however, to examine the reasons for " over-production ", and to see whether any remedies are available.

The chief reason for the over-supply of wheat seems to lie in the sudden development of mechanisation by tractor and combined harvester on large areas of land which are specially suited to such machines, such as the prairie farms of the United States, Canada and Argentina. All these areas, we note, are in similar climatic belts, and all constitute the great continental plains. The result of the sudden increase in the supply, due also in no small degree to the unusually high prices to be obtained for wheat during the war of 1914-1918, was that demand, always

somewhat inelastic for this commodity, had no chance of overtaking supply. The influence of the tractor has been remarkable in several ways. It was the tractor which made possible this very rapid expansion of production. A gradual increase in supply would have meant a slow fall in price, which would probably have set in motion a beneficent cycle of expansion of demand. It is a mistake to regard the demand for wheat as completely inelastic and not dependent on price. A slow increase in the consumption of wheat is taking place amongst the enormous native populations of the world. China was taking ever greater quantities from Australia, until progress was arrested by war ; and this slow increase would, in all probability, have taken care of the slow and steady rise in production achieved with horse traction. One of the first things demanded and needed by a native population, which is starting to rise in the scale of civilisation, is a change of diet. The scope for increase in wheat consumption amongst the rice-consuming peoples of the world is great.

But it was the suddenness of the increase which did the harm. The tractor, moreover, eats no oats. Oats and wheat largely replace each other in the routine of the farm. When the farmer found that the demand for oats was falling, he naturally produced more wheat, and thus once more the supply was increased. The European wheat farmer reacted in the way in which we are accustomed to see the farmer behave. First he cut down his purchases of manufactured goods, when he met a period of falling prices. He tightened his belt and set to work to produce more wheat, working harder to try to make up in quantity for the drop in price. When that too proved useless, and merely resulted in a further over-supply and a further fall in prices, he demanded a subsidy from the Government. The Government, too dependent on his influence lightly to refuse, and, moreover, not knowing what else to do to save him from disaster, granted the subsidy. The final result is that, as in France, the internal price of wheat has risen to a point at which it is utterly divorced from world prices.

But the application of the machine to work on the farm has not taken into account the antics of old Dame Nature, and now she begins to take a hand. The tractor makes no manure. In any case it would be quite uneconomic to apply farmyard manure

to the prairie. It is now known that large areas of the prairie are purely pasture land, unsuited to arable farming and should never have been ploughed at all. The result of the mistaken policy is that erosion by wind and rain is rapidly removing much of the soil altogether ; after a few years of cultivation, on the lighter lands, the soil loses its structure and all binding power, and finally just ceases to exist save as dust. This problem is receiving the most careful attention in the United States, where the great danger to the very existence of large parts of the country is fully recognised. In many parts of the British Empire the trouble is just as pressing, but so far it has received not a tithe of the attention it deserves. We cite an example in the section on Kenya Colony (see p. 83 *et seq.*).

This problem of the loss of fertility is widespread and becoming worse. It arises generally from excessive exploitation of the soil to yield cash crops. Pioneers have made the mistake of applying European agricultural methods to oversea soils where conditions differ. The consequent deterioration of the land is one of the root causes of much of the poverty amongst the agricultural population today.

It may be argued that, if these millions of acres of land gradually and inexorably are forced to go out of cultivation, the wheat surplus would in time find its own remedy. But a cure at what a cost ! The hopelessness of the fight waged by the farmer against declining fertility and its attendant evil, soil erosion, which renders the land more sensitive to drought, coupled with low prices when the occasional good years come, is difficult for the average man to appreciate. It should be the task of statesmanship to find some ways less cruel than the ways of Nature. In addition to remedial measures overseas, it should also be an aim of policy to enable the farmer in Europe to grow less wheat, more legumes and more of the protective foods, milk, butter, cheese, vegetables, etc., so badly needed for our cities. Thus, gradually, the wheat surplus would be relieved at both ends of the earth. The obstacles are political. In Europe, fertility — through variety of crops and more manure — would be added to the land, and in future times, when demand has again overtaken supply from overseas, it would be more fertile and the European farmer would be able, in a properly diversified farming system,

once more to enlarge the production of his old staple cash crop, wheat. With his lands improved he would then be able to produce more cheaply, more and better produce from a lesser area under this one crop. It now seems certain not only that much of the prairie should never have been broken to the plough, but that it is indeed only suited to pastoral farming of an "extensive" character, owing to the poverty of the soil and the low and uncertain rainfall. There may even be grounds for thinking that the long-term problem of wheat is likely to be shortage and not surplus.

In the case of cotton the troubles are not quite the same, though there too the last war did much harm. Excessively high prices and acute shortage led to a vast and sudden extension of cultivation to many countries which had previously been only small suppliers. Brazil, East Africa, Egypt, all contributed more ; while science in America was finding new ways of increasing the yield from a smaller area. Cotton thus came suddenly into increased supply at a time when a new competitor in the shape of rayon was just beginning to reduce the demand. The result has been a chronic glut and very low prices. The rise in consumption, which might have been expected from the poorer parts of the world, has also been delayed by the evil effects of war, uncertainty and economic distress. In the United States efforts to reduce the acreage under the crop and thus reduce supply and maintain better prices, have been rendered largely useless by increasing yields, due to better varieties and to better cultivation on the smaller area, with the result that more cotton was obtained than ever before. The remedies are hard to find. But here, too, Nature will take a hand. Cotton is a crop which is very exhausting to the soil, and one which lays it peculiarly open to attack by erosion and decay. This is being noticed in Egypt, where "black alkali" is becoming a serious danger, and in Uganda where erosion is being greatly hastened ; and the same holds good for other countries. With the return of peace, and probably, therefore, a rising demand for clothes from Russia, China and the world in general, coupled with concerted measures to fit world production to world demand, this situation also will in the long term be alleviated.

Coffee again was brought into over-supply largely owing to

very high prices at the end of the last war. Here, too, we find that the possible world consumption has been reduced owing to war and uncertainty. The big markets of Germany, Italy and Eastern Europe have not been able to obtain their requirements owing to deliberate Government policy. In the United States chronic economic troubles — again, in no small measure due to the last war — have reduced the potential demand.

Peace, welfare policies, fewer armaments on the one hand, and measures designed to adapt production to demand on the other, are the obvious and acceptable remedies for a threat of surplus agricultural production in any direction. It is, of course, true that, as standards of living rise, primary needs — such as food, clothing, etc. — come to represent a smaller proportion of the total personal expenditure. A rise, however, in the consumption of the primary necessities has a very long way to go in the world at large before saturation point in the matter of need is reached.

D. THE OFFICIAL IDEA

We believe the problem to be essentially one of maladjustment. There is no real glut in the sense that the goods could not be used, or that the food could not be eaten if the people who need them could buy them. Our concern is to suggest means by which Government might enable them to do so. In our own Colonies and in India and Burma in the past, the responsibility for initiating new development or welfare policy has been left to the Colonial Governments themselves; the Home Government being content to encourage and indicate major lines of policy, while retaining always the right to control over-ambitious administrators. It has been the rule that in normal circumstances Colonial Governments should not initiate policies which they could not pay for themselves, either from current revenue or from loans which were raised for a specific purpose, and for the interest on which the Colony was responsible.

In certain unusual circumstances grants-in-aid were given, and in July 1929 the Colonial Development Advisory Committee was appointed with the following terms of reference :

" . . . to consider and report on . . . applications for assistance from the Colonial Development Fund, in furtherance of schemes likely to

aid and develop agriculture and industry in the Colonies, Protectorates, and Mandated Territories, and thereby promote commerce with or industry in the United Kingdom."

The expenditure of this Fund was limited to £1,000,000 per annum, and in the eleven years of its existence the Committee has made recommendations involving a total estimated expenditure of £19,284,536, the balance being found from the funds of the Colonies themselves. In their final Report¹ the Committee put it on record that —

"The Committee have frequently felt the limitations which have been imposed on their activities by the terms of the Act, which have precluded them from giving consideration to many projects and types of schemes in the colonies for which there has been pressing need. The most hampering of the restrictions has been that which in general has limited the Committee to consideration of schemes which were of a capital nature and which were related to a policy of material development.

"Their inability to consider applications for assistance towards long-term recurrent expenditure has been a deterrent to the submission by Colonial Governments of schemes which might have been of great value. It has been a necessary prerequisite of the grant of assistance to a Colonial Government for constructional work that the Government would be able, from its normal revenues, to meet the resultant expenses of upkeep after the initial developmental period has expired. This restriction has limited the value of the Act in those territories whose finances were weakest and where the need for assistance was, therefore, the most felt. . . .

"The Committee have been limited to making recommendations only on schemes specially referred to them. In consequence, although the Committee have, where that was practicable, asked for comprehensive programmes of development to be submitted and programmes of this nature have on some occasions been prepared, they have had, as a general rule, no comprehensive picture of a colony's needs. They have frequently felt the need of a general review, on the one hand, of the past history and development, present position and needs, and future potentialities of the territories ; and, on the other hand, of the results following from such schemes as have been assisted by the Fund, and of the causes which have given rise to the success or failure of such schemes."

In the development of native production it is often difficult

¹ See Cmd. 6298, Eleventh and Final Report of Colonial Development Advisory Committee.

to draw strict lines between capital expenditure on development and welfare expenditure. It is from the small schemes inaugurated in a particular district that the greatest benefit is often obtained. These developments and this local welfare expenditure have usually been left to the initiative and resources of the District Commissioner. His efforts have been hampered by financial restriction and pressure of work. He is at the same time the District magistrate and registrar, the Government's tax collector, and the father of his flock. It is a difficult role to play. Moreover, changes of station are frequent and continuity of policy in the District has been hard to achieve.

In the Gurgaon District of the United Provinces an energetic and enthusiastic District Commissioner started an experiment in village welfare and development. The district was exceptionally backward and poor; the villages unusually dirty and uncared for. Crops were poor, while the villager was in chronic debt and behindhand with his taxes. The District Commissioner, Mr. Brayne,¹ started a campaign for all-round improvement with remarkable results. A team of enthusiastic Indian helpers was got together, Boy Scout troops were formed and village guides were trained. The villages were cleaned up and garbage pits dug, which served also as latrines. Trees were planted for fuel, so that the manure could be put on the fields and not burned in the fires. Bunds were built to stop erosion, tanks were dug to yield water for irrigation. New seeds were introduced and better cultivation preached. Iron ploughs and the Persian wheel — a much more economical irrigation device for the wells than the indigenous skin bucket — were brought into use. Fairs were started, and films shown of improved methods, while village markets were improved and the health of the villagers received attention from dispensers and nurses trained in the district.

Naturally this cost money. Mr. Brayne calculated that this policy cost approximately one anna per head in the first year, two in the second, three in the third, and five annas in each succeeding year. This money his keenness and enthusiasm enabled him to raise almost entirely from the Indians themselves.

¹ See F. L. Brayne, *The Remaking of Village India*. (Oxford University Press, 1929.)

They were richly repaid, for the income of the District was increased by many lakhs of rupees, and the general condition of the people was immensely improved.

Then Mr. Brayne left Gurgaon and the whole edifice collapsed. The iron ploughs and Persian wheels went out of service, largely because there had not been time to train sufficient village craftsmen in their maintenance and repair. The fairs were discontinued. The garbage pits fell in through the rains, and there was nobody to encourage the villagers to take the trouble to dig them out and spread the manure on the fields. The whole District rapidly went back to the old ways.

Yet it is just from the consistent application of such a policy that the greatest benefit can accrue. The village scheme, here a road, there a well ; in one valley a swamp to drain and turn into fertile land, in another a dam to stop the wash from a hillside, trees for fuel and manure for the lands, — these are what the native needs. But continuity of effort, and much greater financial assistance than has been given hitherto, are an absolute prerequisite of success. Such work should not be left to the part-time efforts of the district officers, already very busy men with their strictly administrative duties.

The development of colonial resources has in the main been left to private enterprise, and this naturally and rightly has chosen the most profitable outlets. In Africa the greater proportion of private capital has gone into mining, much less into commercial and agricultural enterprise. Government has in the main restricted its efforts to the provision of communications and the normal fabric of administration. The intensive development of native production, the conservation of the soil combined with the long-term development of country and people on a consistent, well thought-out plan, has not yet been attempted.

With the publication of the "Recommendations" of the West India Royal Commission (Cmd. 6174) the Government have committed themselves to a "Statement of Policy on Colonial Development and Welfare" (Cmd. 6175). They have seized the occasion of the Commission's Report to give their answer to Parliament's concern about Colonial Development expressed in the debate in June 1939. The Commission were interested primarily in the pressing needs of welfare work.

Development bulks less largely, for they recommend a "Welfare Fund", and the Minister's covering letter puts "social welfare" before "development". The Government speaks of a "balanced and comprehensive plan" (§ 14) for development, but it is clear from the general tenor of the Statement that it is a plan to be pursued along the present lines of Colonial administration. The Commission envisages "long-term" programmes (of social reform), and the Statement, in announcing the abandonment of the old principle that a Colony should ordinarily be self-supporting, establishes liability for "maintenance of important works and services over a substantial period of years".

This is certainly a welcome step forward, but, while the Commission's programme for the West Indies required twenty years, the Government's policy for the Colonies as a whole is limited to ten. We can only say that no true long-term policy of development, in the proper sense, could possibly be tested within so short a period; a generation or two would be required. Nor is there much evidence in the Statement, except in a number of well-turned phrases, of a realisation of the very great necessities which Colonial *development* proper should meet and the very great possibilities which it could realise.

While an independent authority is to be set up for the West Indies as a whole, for the rest of the Colonial Empire Colonial Governments are apparently to be invited to "prepare development programmes for a period of years ahead". These will be considered in Downing Street with the help of various committees, with the idea, apparently, of finding some common development denominator for the Colonial Empire as a whole. This does not go more than one small step along the road in the direction of what either full development or research should mean. The list of "enquiries" recommended by the Commission (21(d), p. 21) does not include a geological survey; it is a list rather than a concerted plan. Research must be accompanied not only by survey, but also by experiment. It must certainly be based on a central organisation; but will a committee suffice for this? Research, in its local application to different colonies or regions, needs to be organised in a local research unit.

The bias of the two documents seems to be towards develop-

ing agricultural production for export. On Mr. Hall's principles,¹ the primary need is to organise the internal market first. This involves most careful consideration of the right type of agricultural organisation, not forgetting soil conservation and the balance between arable and pastoral farming. Worthington² stresses the fact that, though the development of Africa had hardly begun before the twentieth century, science has not led the way. She has been neglected, with the result that economic development has too often taken the wrong turning.

"Road and rails have been built before there were accurate maps on which to mark them ; crops have been introduced and grown under all kinds of conditions, regardless of the suitability of the soil ; inter-tribal warfare has been stopped ; we seek to increase the native population, improve their standard of living and economic status, and native stock multiplies to such an extent that the earth is denuded of vegetation and the soil may be washed away to sea by the next storm. A development based on a real understanding of Africa's potentialities has hardly yet begun, and will be impossible until the necessity of scientific knowledge is recognised."

Can these things be thought out in London on the basis of programmes proposed by the various Colonial administrations ? In our view, the business of development should be separated from the duties of administration. It needs a different type of training and outlook. Men with practical experience of colonial development could well be associated with officers of the administration, who would be appointed specially for the work and to whom, therefore, development would not be a part-time job.

And there is one further point. The Commission contemplated that, in the West Indies, the " Comptroller ", who was to be (and is) a high and experienced official, appointed to advise and cooperate with the West Indian administrations in carrying out the policies of the Act, should have " wide discretion ", and that his operations should " not be subject to such detailed scrutiny by the Treasury as " estimates of colonies receiving grants-in-aid. On this point the Statement of Policy is significantly silent ; but we consider that it is a fundamental necessity, in the kind of colonial development that we envisage, that the

¹ See above, p. 8.

² E. B. Worthington, *Science in Africa*, p. 24.

authority charged with that development should have a wide latitude, within limits laid down, to plan and to carry out development at its unfettered discretion. It is the only possible basis of proper, business-like management.

We cannot leave this subject without a reference to the debate which took place in the House of Lords on July 9th, 1941. The Secretary of State for the Colonies was asked what steps were being taken to implement the provisions of the Colonial Development and Welfare Act, and made a statement on the present position and future prospects. In spite of the use of the phrase "long-term policy", the procedure remains one of inviting Colonial Governors to "put up good schemes" and urging them to "do their best to frame plans for the future" to enable action to be taken when conditions permit. Twenty-four schemes costing £380,000 were being considered and seventy or so were in preparation. Initiative remains with the Colonies and censorship with the Colonial Office. Our view is that the process should be reversed, and that an authority independent of the administration and competent to visualise the effective development of the whole huge estate should draw up comprehensive plans on broad principles and on an adequate scale and, when these have been duly agreed and approved, should be charged with implementing them. Once given the far-reaching decision to apply capital to development, a proper conception is required of the immense possibilities of a well thought-out programme. There is a world of difference between patching and re-making.

E. THE DEVELOPMENT AUTHORITY METHOD

With this comment upon the official conception of a development policy in the traditional mode, we pass to consideration of the type of method which we regard as necessary to secure effective results. We have given an instance of development at work in the case of the Wagishu and its result. In our view, once peace has been achieved, and perhaps even before this, the correct line of attack consists in the judicious development of the unused resources of the world. The attack on agricultural distress, proceeding through careful experiment, followed by rapid action on a large scale, could set in motion the cycle of increasing produc-

tion and increasing demand. At the same time we recognise that production must be properly diversified, and that too great attention must not be given to any single crop.

The general requirement seems to us to consist in systematic organisation based on most thorough information. With this in view, we therefore set to work to think out how we could get this cycle moving, and began to construct a scheme for the development of one of our own Colonies. Here, it seemed to us, was a practical step ; something which Britain could *do*. We very soon came to realise that rapid development on any effective scale was quite impossible by present methods. Private initiative is not enough. The great dangers of soil deterioration, for instance, cannot be adequately controlled when development is left to the individual. Here was work which, from its scale alone, rendered necessary the intervention of Government. Any great scheme of rapid development in the Colonies by individual and exploitative methods would surely mean further deforestation, further loss of soil fertility and consequent erosion. Forces might be set in motion very difficult to control. The most careful thought and adequate preparation are needed, coupled with control and patience to await returns.

Development work, if it is to be sound, must be founded on organised knowledge, must be very carefully planned and will often not show sensational results. Such a policy is always hard for a government or business interests to pursue. Many of the development schemes by their nature cannot be interesting to private enterprise. In the past they have been nobody's business ; but, before Government can act on a large scale, they must consider the inertia and ignorance of the facts displayed by even the best educated of our people. It is difficult to see how enthusiasm for such work could be aroused ; here is no possibility of Party gain.

Yet we must not demand a new social order. Our ideas and methods must constitute a practical policy and must fit into our democratic system. We must find means to arouse general interest, win popular support and gradually to stimulate the enthusiasm which is needed. Our methods must give scope for growth and for change with growing experience ; they must be in our present traditions.

We, therefore, came to the conclusion that some form of Imperial Development Authority was required, which would have to be financed and controlled by the Home Government. This Authority, besides undertaking development, would centralise for the whole Empire all scientific research and collect and disseminate business information on the lines of the defunct Empire Marketing Board. It would act in the individual Colonies — or in groups of Colonies — through subsidiaries which it would set up for this purpose. These would be able to enter into agreements with the individual Colonial Governments to perform certain development work as required by them. In the case of very backward and under-developed countries where conditions were still primitive, the Development Authority might undertake multifarious responsibilities, — the building of ports, railways and roads, the control and conservation of forests and the search for minerals, the opening-up of agricultural land for settlement, and the assistance of selected settlers. In some cases, where land tenure was troublesome, it could operate a Land Trust and could find funds for Cooperative Societies and Land Banks. It could act as the Government's Estate Agent. In other relatively highly developed Colonies it could enter into agreements with Government to undertake specific tasks upon agreed terms. We consider that Colonial Governments should have the right to terminate the agreements at the end of a fixed period, or with the consent of the Secretary of State, on giving due notice. They should then be prepared to buy out the works of the Authority on terms to be laid down by arbitration.

The direction of such a body, we suggest, might be formed partly from Government officials, specially selected and seconded for the purpose, and partly from members of the business community, who would be required to sever all connection with private business on their appointment. In the Colonies the subsidiaries might have directors appointed, half by the Colonial Government and half by the Imperial Development Authority, with the Governor of the Colony as chairman *ex officio*.

This kind of Development Authority would be able to ensure continuity of policy and, at the same time, the terms of their agreement could be varied to suit the conditions of each Colony. One difficulty, from which colonial peoples have suffered in the

past, has been that a very large part of the money spent on development work has been loan funds provided at fixed rates of interest on terms which sometimes have not allowed of conversion. In times of falling prices this interest has been a heavy burden, and there is much to be said for a system which would allow of direct investment rather than loan for productive works. A Government can hardly make and manage such an investment itself, but a Development Authority could. It would have a position comparable with that of the Electricity Commissioners, the L.P.T.B., the B.B.C. or British Overseas Airways.

The finance for the Imperial Development Authority, we suggest, should be found by the Home Government, and in Chapter VI B we have suggested some ideas whereby this might be done. The subsidiaries would certainly be financed in large part by the parent Authority ; but there would be no difficulty in the way of a Colonial Government finding money itself for shares, or taking shares for land handed over to the Authority for administration, or raising capital by loan for specific objects, which the Authority could manage. This would be somewhat in the manner in which the Sudan Plantations Syndicate operates in conjunction with the Sudan Government, although, in this case, local facilities for irrigation make it comparatively easy to assess the return on invested capital.

We have given various instances of different problems and suggested how the Authority method could be adapted to their solution. Of course such a scheme for intensive development of the Empire would affect the Dominions and India, and, indeed, on the research side, it could not help affecting the whole world. If widespread cooperation, and especially that of the Dominions and the U.S.A., could be obtained, it seems to us that there might also be a possibility of working out — by means of similar Development Authorities — a constructive cooperative approach to the long-term problems which this war will leave behind in the world at large. Already plans are being made for the relief of Europe — and, we hope, of China — when the struggle is over. Long-term plans of constructive policy will also be needed. To the formulation of these, such an Imperial Development Authority as we have proposed, might — perhaps — have its contribution to make.

For development of colonial resources upon the scale contemplated it is obvious that the capital, the organisation, the ideas and the impetus must come from this country, and be applied upon major lines of policy laid down by Parliament. At the same time we regard it as essential that, in the task of working out the policies adopted, the colonial peoples themselves should be associated from the very start. It is true that, in varying degrees, continuous and progressive education in the art of economic development would be necessary. But the colonial peoples must be made to feel throughout that results are their own handiwork and that they are building their own characteristic future. At first they could contribute little ; but self-help, as a prelude to self-government, should be the constant aim.

Above all, however, we see here a first practical step which we can take to discharge the immense and inescapable responsibilities of British statesmanship. Here too is something which we can do in however small a degree to help towards making our Empire a model for the world. If we could show how our own Colonies could be steadily developed for the benefit of their peoples, and how the fruits of this development could be made increasingly available through trade and commerce to the world in general, we should have advanced a step along the road to the solutions of the greater problems of the world.

But any form of rapid development must encounter great difficulties, and the methods to be used will demand the most careful consideration. We hope to show one way whereby sound, well-laid plans for development can be prepared and carried out, and to illustrate the immensity of the work there is to do. We seek to tell a plain unvarnished tale of the ordinary things waiting to be done. If there is so much to do in our own Empire, what a work there is for the world !

CHAPTER II

THE THINGS THAT WE CAN DO OURSELVES. BRITISH HONDURAS : AN EXAMPLE

I. INTRODUCTORY

§ 1. *The Problem*

WE felt it necessary and advisable, as we have said, to make some attempt to provide an example of the way in which the economic ideas that we have tried to sketch out might be applied to some particular British Colony. For this purpose we have chosen British Honduras. "Why pick on British Honduras?" someone may say. There are, indeed, a number of perfectly good Colonies, which are perfectly good examples of how Colonies should *not* be run, or, shall we say, furnish results typically conditioned by the piecemeal, *ad hoc* measures alone possible under the present methods of administration and development. We might have chosen any one of a number of Colonies to illustrate the *kind* of way — as we think — in which colonial development should be tackled in modern conditions. We have no special reason for "picking on" British Honduras, except that its problems aroused our keen interest and its possibilities stimulated a measure of developmental enthusiasm. In fact, it seemed to us to be a typical case where over-exploitation of one of the Colony's natural resources has threatened danger. It seemed that greater attention might have been given to a fuller and more broadly based development, and that, thereby, a larger population could have been supported. We are not forgetting that this Colony was among the first to pledge its support to Great Britain in the war against aggression, and voted £1000 towards war purposes. Indeed, this has but confirmed our view that British Honduras was a happy example to choose for illustrating new and far-reaching methods by which the material resources and the well-being of the people of a British Colony might be adequately developed. In our view, the conception of the problem needs lifting on to a wholly different plane, a view aptly expressed in *The Times* of

December 29th, 1939 : ¹ " the world . . . will need a programme of relief, reconstruction and spiritual succour beyond anything ever undertaken in history ". If any justification for our choice were needed, it is provided by the following passage from an article contributed to the *Empire Forestry Journal*, vol. 4, no. 1, 1925, under the title " Development of Forestry in British Honduras ", by Mr. J. N. Oliphant, then Conservator of Forests, Belize, and subsequently Director of the Imperial Forestry Institute, Oxford ; and now Chief Conservator of Forests, Nigeria :

" . . . we have an area of 8500 square miles, mostly forest, an equable and by no means unhealthy or unpleasant climate ; a population of only 45,000, representing most races under the sun, chiefly exotic, speaking several languages, British in sentiment, somewhat Americanised in habits, largely concentrated in the few small towns ; fertile soil ; rapid vegetative growth ; agriculture of a permanent character almost negligible, shifting cultivation destructive within limits set by the sparseness of the rural population ; communications poor, roads few and bad, waterways numerous but mostly navigable with some difficulty ; survey backward, large tracts being still unexplored ; rural development neglected owing to mistaken land policy in the past, and to absentee landlordism. The staple industries of the country, involving the destructive exploitation of forest produce, have been logwood and mahogany cutting, and the collection of chicle, a latex derived from the sapodilla tree (*Achras Sapota*) and used as base in the manufacture of chewing gum. The first of these has almost succumbed to the competition of aniline dyes, which, however, will probably never quite kill it ; mahogany is still the main support of the Colony, exhaustion of supplies having been delayed by inaccessibility. Mechanical traction is now opening up areas hitherto unworkable, and it remains to be seen whether forestry will be able to restore the capital stock of the depleted mahogany forests with sufficient rapidity to prevent a large drop in the output. The wild chicle industry is declining owing to the wholesale destruction of the sapodilla stock by crude tapping methods encouraged by lack of control ; it is hoped to replace it by intensive silvi-culture combined with improved methods of bleeding."

As we started without local knowledge or experience of British Honduras, it was, of course, necessary to study — as far as

¹ Telegram from the New York correspondent, apparently representing Mr. Walter Lipmann's views.

possible — the material available on the resources of the Colony ; the extent, nature and method of their development, and the kind and amount of development that appeared to be desirable. The next step was to settle, as far as this can be done *a priori*, the aims of such development. Broadly speaking, these are two ; — first, by developing and strengthening the internal economic structure and market, to secure a progressively rising standard of living for the existing inhabitants and for the immigrants of suitable type who are indubitably required ; and, secondly, to decide what can be produced for export with the efficiency necessary to justify competition in the most suitable outside markets.

Next on the agenda will be the drawing-up of a programme of necessary capital construction works in order of their urgency, not omitting the vital requirements of survey, research and experiment to be provided for in the earliest stage. The activities of the Colonial Development Advisory Committee, admirably distributed over the vast field as they have been, within their severely limited scope, were wholly inadequate to develop the economic potential at which we think it imperative to aim ; in perhaps the majority of cases they can barely cover, if even so much, the minimum necessities of a Colony, let alone its maximum requirements. Concomitantly, a careful estimate will have to be prepared of the cost of such works, together with the all-important question of a judiciously framed scheme for providing capital. Large ideas are apt to be costly, and much thought and skill will have to go to the framing of finance that will be at once adequate and practically possible. In every step taken, the relationship of the Colony both with the Empire and the world in general should be kept in full view. Every encouragement should be given to the Colony to develop its sense of common purpose with the Empire, and to realise its power to contribute to the general welfare of the world.

§ 2. *Descriptive*

British Honduras is situated on the east coast of Central America, facing the Caribbean Sea and bounded — on the landward side — by the Republics of Guatemala and Mexico. The area is about 8800 square miles — including some 200 square miles of cays — about the same size as Wales and twice that of

Jamaica. The population is about (in 1938) 57,000, or about 6·7 per square mile, and some 30 per cent of the number live in the capital, Belize, and some 20 per cent more in other towns. Although British Honduras lies in the Tropics, the climate is almost sub-tropical and trade winds and sea breezes blow for about nine months of the year. It is not generally unhealthy. The mean annual rainfall varies from 120" in the south to about 60" in the north, and there is a distinct dry season from February to May.

The main regions are :

(1) The flat northern plain of low relief — lying north of Belize and occupying about half the Colony. This is underlain by a thick series of massive limestones and marls of Oligocene age, the Rio Dulce formations. The limestones weather readily and give in places fertile soils ; the marls less readily, and these yield large areas of stony, flinty land of less value. Almost the whole area is covered with forest of various types, save for the small areas of cultivation in the river valleys and for some open savannah.

(2) The southern central Maya mountains, of general altitude 2000 to 3000 feet, rising to a summit in the Cockscomb range of 3700 feet. These are a complex of slates, schists, sandstones and blue limestones, with granite and porphyry intrusions which mineralise the complex. The total area is some 1300 square miles, and gold, tin and manganese have been found, though not in payable quantities. The whole area is forested, in part with mixed hardwood and in part with pines. Rolling highland occupies some 600 square miles of very little known country, mostly on the western slope.

(3) The low-lying southern plain lying west of Punta Gorda, and known as the Toledo district — in extent some 650 square miles. This contains much extremely fertile land and is underlain by a series of shales, mudstones and limestones — of Miocene age, with isolated hills of the Rio Dulce series. The whole is under forest, save for a few scattered Indian villages and other small blocks of cultivation.

(4) The coastal plain varying in width from five to ten miles, and lying to the east of the mountain region and south of Belize. This alluvial plain was submerged in recent times — geologically

speaking — and, when well drained, it contains some fertile soil, but in part it is a series of ridges of pure sand which supports pine forest and is quite useless for any other purpose. The gradient being very slight and the drainage, therefore, often poor, there is much mangrove swamp.

(5) The cays and coral reefs. There is an innermost reef extending almost the entire length of the coast at a distance of fifteen to thirty miles from the shore, and two smaller reefs further east — a total area of some 200 square miles.

The main watercourses occur in the northern region, two of which, the Belize and Sibun rivers, rise in the Maya mountains and two — the New River and the Rio Hondo — rise in low hills lying to the west of the northern plain. Other rivers draining the Maya mountains rise in a divide some twenty-five miles from the coast. All the rivers flow east into the Caribbean Sea, except the Rio Hondo and the New River, which flow north.

The capital, Belize, is also the main port, and is situated at the mouth of the river of the same name. North of this point the sea to the landward side of the inner reef is very shallow. Besides the traffic from the northern plain, there is also considerable *entrepôt* trade both with Petén and with Quintana Roo, for which it is the nearest deep-water port. The land on which the town is built is very low-lying, being only about one foot above high water. The drainage is therefore very poor, while, owing to the shallow water, ships have to lie some two miles off shore.

Transport and communication into the interior is still chiefly by motor boat and small craft along the rivers. A new road from Belize to Corozal (99 miles) has been built, and roads are slowly being constructed to Cayo (90 miles) and from Punta Gorda to San Antonio (21 miles). Commerce along the coast is entirely by schooner and motor boat. There was a short railway along Stann Creek which was built for the banana trade, now ruined by disease, and this has been transformed into a road. There are a few bush tracks and paths, and settlement needs must be confined to the rivers, which have hitherto provided the sole means of internal communication and transport.

The population is very mixed and is descended from Spanish and Maya elements, Africans and immigrants from the neigh-

bouring Spanish-American republics, together with a mixture of English and American blood.

There is considerable unemployment which in 1938 caused some anxiety, and labour actually emigrates for work. Traditionally, forest work is highly regarded and agriculture is despised ; and, indeed, it is estimated that there are only about 67,000 acres under cultivation in the whole Colony out of a total of some 5,000,000 acres. The export figures show the outstanding character of forest industry, and, indeed, the Colony can be said to be almost entirely dependent for its existence on mahogany. Founded in the seventeenth century to exploit mahogany and logwood, to the present day its fortunes remain linked almost entirely with the export of forest products. In recent years it has become evident that the stocks of mahogany were suffering from depletion, the result of over-cutting without any attention to reproduction. Even in the best forests there has been a steady diminution in output ; nature unassisted is unable to reproduce the supply of timber at the rate at which it is being removed. A Forest Department has been established and some progress is being made, not only in replenishment but also in improvement of the stands of valuable timber.

The interior is little known apart from the river valleys and the road to Petén via Cayo ; but it would seem probable that the highland areas, behind the Maya mountains and sloping to the west, could provide scope for pastoral industry. Up to the present day, agricultural industry consists in a small export of bananas, grape fruit, copra, sugar and rum, and a subsistence agriculture based on the shifting cultivation of the Maya Indians. Remains of the Maya civilisation cover very large areas of British Honduras, and it seems certain that a much larger population occupied the country some five hundred years ago.¹ The soil is varied and many types have been examined, and much very fertile country exists. Certainly large areas are suited for agricultural settlement and development — if carefully controlled and guided by officers skilled in the special needs of tropical soils.

Geologically the country has not been properly explored. A Survey was started with one lone geologist, and then abandoned

¹ Dr. Gann, a former medical officer of British Honduras and an archaeologist of authority, estimated that the ancient Maya population was over 750,000.

after five years as "no payable deposits of mineral had been found". Gold, tin and manganese were proved to exist over a large part of the country, in areas geologically favourable to the discovery of mineral deposits. As it is usually considered impossible for a prospector to examine thoroughly more than ten or twenty square miles per annum, the chances of any discovery being made in the short time that the Geological Survey existed can be estimated. A great deal of essential preliminary work was done, and the main geological features were disclosed and mapped. If no payable mineral deposits were found, nobody can say that they do or do not exist. Adequate search has simply not been made.

§ 3. *General Outline*

We are left with a picture of a fertile, well-watered land with a good climate, supporting seven persons per square mile, in all less than 60,000 people; while not far away Jamaica, with less than half the area, supports over a million and a quarter. In a country in which five hundred years ago there existed a flourishing civilisation and a large population, the population is now represented by a few scattered Indian villages, and the civilisation by ruins and mounds covered by tropical bush. It is a country which has existed, since its foundation as a British Colony nearly three hundred years ago, on logwood and mahogany and which still lives on mahogany. Agriculture is neglected and even despised; unemployment, malnutrition, chronic disease and distress are found in a country which lacks all but the most primitive means of communication, and the development of which can hardly be said to have begun.

The responsibility for the backward condition of British Honduras cannot fairly be imputed to the inhabitants. An isolated community, a little known country — off the great trade routes and far from the centres of population — such cannot be expected to possess the vision and the imagination, the initiative or the capital to start schemes of large-scale development. They are necessarily too much occupied with the hard daily struggle to gain a livelihood. Even if they did have the ideas, no large-scale plans, with the research and expenditure which must be involved, could possibly be financed from the meagre resources

of the Colony. It is on the people and Government of Great Britain that the responsibility must rest. Britain can and should find the remedy.

To realise the present position it is instructive to examine the trade statistics since the beginning of this century :

BRITISH HONDURAS : DOMESTIC EXPORTS
(From Statistical Abstract of British Empire)

1903		1913	
Description	Value, £ *	Description	Value, £ *
<i>Total</i>	380,931 †	<i>Total</i>	294,580
Items over £2000 :		Items £6585 and over: ‡	
Mahogany . . .	101,247	Mahogany . . .	132,289
Logwood . . .	51,385	Chicle	61,052
Bananas . . .	32,665	Coconuts . . .	31,793
Chicle	15,407	Bananas	30,323
Coconuts . . .	9,830	Logwood . . .	10,907
Cedarwood . .	7,298	Cedarwood . . .	6,585
Plantains . . .	3,676		
Tortoiseshell .	2,982		
Rubber	2,673		

* Equivalent of gold \$ given as 4s. 1½d.

† Apparently includes re-exports.

‡ These are all the items given for this year.

(From British Honduras Blue Book)

1926		1938	
Description	Value, £ *	Description	Value, \$
<i>Total</i>	392,794	<i>Total</i>	1,816,274
Items £3398 and over: †		Items over \$10,000 :	
Mahogany . . .	285,417	Mahogany logs .	777,177
Chicle	23,010	Chicle	289,891
Coconuts . . .	22,493	Bananas	282,890
Bananas	11,071	Mahogany lumber .	264,194
Cedarwood . .	5,167	Grape fruit . . .	84,447
Logwood . . .	3,398	Coconuts	48,803
		Cedar logs . . .	25,575
		Total mahogany logs and lumber, \$1,041,371	

* Equivalent of gold \$ given as 4s. 1½d.

† These are all the items given for this year.

The impression given is one of stagnation, and we may well

be pardoned for wondering how development could be organised to get better results. Private enterprise has obviously failed utterly to do the job, and we must now try to imagine how a Development Authority, sponsored by Government, might attack the problem.

A balanced development is much to be desired, aiming at as wide a diversity of products as can economically be produced ; — forest, agriculture and mineral resources, all should be explored and tapped, and secondary industries (the processing of lumber, for instance, and of agricultural products) should be started where that may be possible. One of the first difficulties we encounter, and one which has in no small degree contributed to the present backward state of the Colony, is the question of the ownership of the land. Only about half the area is Crown land subject to certain forest rights and concessions. This consists chiefly of the central mountains and of some lesser known and infertile country. If any large-scale plan of development were to be put into operation, it would certainly be necessary to consider the repurchase of large portions of the territory previously sold, and for the Government to review in detail all the forest and land concessions. The guiding principle should be that adequate compensation should be paid for disturbance, but that the public interest must be paramount, and no large holdings should be permitted which cannot be rapidly and effectively developed.

The largest private landowner owns some 1720 square miles, or 1,250,000 acres, in the north and centre of the Colony. It would seem that such blocks of land ought to be acquired by the Government at a figure which would take into consideration the attempts which have been made by the companies to work their lands on proper forest methods. Parts of this land were surrendered to the Government in 1935 in lieu of payment of taxes at a value of 60 cents per acre.

Other large landowners derive their revenues principally from royalties and stumpage paid by contractors for cutting the trees. Here, also, it would seem that there should be no insuperable obstacles to acquiring further large blocks at figures which were fair to both parties. The remaining Crown lands should be handed over to the Authority to develop on an agreement to

spend a fixed sum on the general development and amenities of the Colony. Where it was decided to continue the exploitation of the forests, the present organisation would naturally be continued to start with ; but, with more ample capital available, and with a long-range plan of development and conservation in view, the methods would be changed and amended.

In principle, no more lands should be alienated to private ownership, and in any case no allocation should be made save in very exceptional cases, not indeed until a land utilisation survey was complete. When this had been done it might be found that certain lands were only suited to large-scale pastoral organisation, and these might perhaps be opened to private capital to develop. Strict conditions would, of course, be included in the lease, sales should not be considered, and in every case of lease, proof would be required that adequate capital was available. This would not, of course, prevent the Authority from assisting and finding capital for suitable schemes where a private entrepreneur was hampered by lack of means. The Authority exists to help and supplement private enterprise, not to supplant it.

Where peasant agricultural settlements were to be formed, the land should be rented to the peasant, but should remain the property of the Authority. We wish to ensure proper methods of cultivation, aiming at the highest possible standard of living for the occupier, coupled with the conservation of the fertility of the soil. Only if the land remains the property of the Authority will adequate control be possible. The peasant farm needs to be of a reasonable size, but the system of individual ownership usually results in excessive subdivision on the death of successive owners. We wish to prevent the ultimate growth of too large numbers on land insufficient to support a reasonable standard of living without excessive exploitation of the riches of the soil. Peasant agriculture can be a very efficient system, but it needs intelligent control, and much trouble in the future will be obviated by a study of the weaknesses of this system as it exists in Europe and Asia today.

With regard to procedure, we imagine that, with the decision to tackle development by the Authority method and the constitution of the Imperial Development Authority, the latter would send a Commission to visit the Colony. Similar Commissions

would be sent to any other Colony in which it was proposed to start operations. The Commission would report as promptly as possible on the state of the Colony and the development works required. The Imperial Development Authority would then consider its report in the light of the economic needs of other Colonies, the Home Country and the world in general. A scheme would be drawn up for the systematic development of the Colony in the form of a draft agreement or charter for the proposed subsidiary Authority. This draft charter, after due reference to the Colonial Government and when finally agreed by all parties, would receive the assent of the Secretary of State for the Colonies. The Colony and the Authority should have the right, if it seemed desirable in the light of experience, to vary the charter later on by agreement and with the sanction of the Secretary of State. Arbitration boards should be agreed to in the case of dispute.

Either side, also, should have the right to determine the charter altogether, subject to the consent of the Secretary of State ; and the Colony should have the right on determination to take over all the works and assets of the Authority in the Colony on payment of compensation. The amount and method of payment would be determined if necessary by arbitration, with the right of appeal to the Privy Council.

The directors of the subsidiary Colonial Authority, we suggest, might be appointed half by the Colonial Government, half by the Imperial Development Authority, and the Governor would be *ex-officio* chairman.

In some Colonies there might be comparatively little scope for the activities of a Development Authority ; in others the widest responsibilities might be undertaken. This would depend on the needs of the Colony, the state of its present development and the desires of the Colonial Government. In British Honduras we have tried to show an example of an Authority taking over and expanding certain departments of the recognised work of government, where the work cannot now be done adequately owing to the poverty of the country. We prefer this method also to a system of long-term loans (such as the twenty-year loan suggested by Sir Frank Stockdale for the purpose of fostering peasant settlement in coast lands of British Guiana), because of .

the burden which fixed loan interest becomes in bad times. This is a matter, however, which would be decided in the terms of the charter, and so we have simply tried to illustrate the method with reference to the problems of a special Colony.

Such an actual example will make our meaning clearer, and it is as an example of a method that our ideas and figures should be judged.

Our object is to consider how British Honduras could be developed on a long-range scheme. We are compelled, for convenience' sake, to divide the work into departments, but we cannot too strongly emphasise that all the work is going on *pari passu*, that all departments interlock, and none can really succeed save by cooperation with all the others. This we conceive as the essential difference between development by an Authority and the old method of *laissez-faire*. We would found all our work upon methods, tested by experiment and guided by the greatest degree of accurate knowledge, and constant coordination of all activities to a common aim; the welfare of the people and the land.

II. DETAILED STUDY

§ 1. Survey : Research and Experiment

Any attempt to draw up an ordered scheme for development would demand as a first necessity a detailed knowledge of the Colony. This presupposes accurate contoured maps and a comprehensive survey of the conditions as they exist at present. A topographical survey by ground methods would be a slow and expensive affair in such a densely forest-clad country; and a more accurate knowledge would be obtained of the distribution of the types of trees by aerial survey¹ than would be possible from the ground. It is well known that different forest types show the existence of different soils, drainage and geological conditions. Such surveys are, therefore, of the greatest direct importance to the agricultural officers, who are enabled thereby to assess immediately the areas of various broad divisions of soil type. While soil survey has already begun in the Colony, much more work would be wanted before complete plans for general

¹ Some aerial survey has been carried out.

development could be made with certainty. It is probable that an aerial survey would be needed at once. "An aerial survey¹ on a scale of 1 : 62,500 with exact horizontal and vertical control can be accomplished for an expenditure of around \$175 per square mile." We do not require this for the whole country at first, but only for the key areas where settlement was likely. For the forest areas likely to be developed, aerial survey has many advantages over ground work, as also for the preliminary survey of probable lines of communication. Furthermore, the cost might be less if such work were being organised on an Empire scale and the help of the R.A.F. could be secured. We have, therefore, made an allowance for £100,000 the first year and for £50,000 the second.

A geological survey could now work much more easily and should be started with a staff consisting of the director, an assistant, and two trained and experienced prospectors, with the laboratory and library equipment needed.

The object of this survey is not only to study the rock formations and general structures of the country, but also to try to discover payable mineral deposits. It will probably be necessary to do much work in British Honduras which is usually left to the individual prospector or to exploration companies. No mineral of value has yet been found in paying quantities in the country, and it is always very hard to interest capital in entirely new fields until something good has been proved. The survey will, therefore, here be working as a prospecting company, but at the same time every endeavour must be made to help the other departments in the purely scientific side of a geological survey.

Expenditure.—Salaries : director, about £1200 ; assistant, about £800 ; two field men, about £500 each. Total, say, £3000 per annum. Assay equipment, tools and laboratory stores, etc., will be considerable and, as regular prospecting is to be undertaken, large numbers of labourers will be needed if rapid progress is to be made.

An estimate of some £10,000 for the first year and £15,000 for each succeeding year may be made unless something is found, when more will be wanted to develop the discovery. No estimate can be given for the requirements in this case, but it may be

¹ British Guiana Refugee Committee Report.

mentioned that for an ordinary straightforward discovery of reef gold, £10,000 would probably be sufficient to open up the find to the stage where capital could be interested and a considerable price demanded.

An aerial survey is often also of the greatest assistance to the prospector, and it might be worth drawing attention here to the great advantages which accrue to a new country when mineral deposits are found, even when, as in the case of British Honduras, it would seem probable that the future will lie in agriculture and forestry rather than in any very great mining developments. One never knows, however ; and even if comparatively small, an active mining industry provides profit to the community and a substantial revenue to the Government. More important still, attention is drawn to the country, and men of education, initiative and wide experience are led to interest themselves in the wider prospects of the Colony. Men who came originally in search of mineral, or for employment in the mining companies, will often enter other lines, and the whole atmosphere of the community is enlivened.

In general it may be said that the research work of the Authority will fall under two main headings, and might best be organised in separate branches :

(a) General economic information.

(b) Particular research on technical development problems.

Under the first head will fall the collection of information concerning the natural resources of the Colony, and the attempt to correlate these with demand from the outside world. This branch will work in close touch with the Information Bureau of the Imperial Development Authority in London ; it will in fact be the eyes and ears of this Bureau in British Honduras. Its first major constructive work will be to undertake a land utilisation survey of the Colony, which, when completed, will become the Domesday Book of the Development Authority. This will have to consider the vexed question of the capital. In very many ways Belize is unsuitable. It is low-lying, only one foot above high water, subject to hurricane disaster and has poor drainage ; naturally, therefore, insects, land crabs and other serious nuisances are common. The existence of great swamps to the landward

side is a further disadvantage, and makes transport save by water difficult. A healthier site on high land would have many obvious advantages, particularly if railways were to be developed. On the other hand, Belize has the advantage of being on the river of the same name, down which much timber comes, and it is the furthest point north which ocean-going vessels can reach owing to shoal water. It is, therefore, a convenient point for loading timber which comes from the north as well as that from the west. A railway, however, might change this also. So the whole question would seem to be indissolubly linked with the plan of the general development of the country, and a decision must await that plan.

C. Hummel remarked, in 1921, that the field for economic, technical and botanical research was almost unlimited, and he noted 180 different kinds of trees himself. He specially remarked upon the possible existence of neglected or unknown forest products. Work has, indeed, been started on this subject with the aid of the Colonial Development Advisory Committee, but it is probably desirable that a Forest Research Institute should be formed to study the peculiar problems of this whole region, and if a World Development Authority were under consideration, such an Institute would obviously come under its aegis. Its influence would extend all over Central America, the Antilles and the Guianas, and possibly also Brazil. Local work in each territory could be on similar lines, methods of training and research would be unified, and results would be pooled. There is very much to be done by each unit individually, but the best results will only be achieved by wide cooperation.

The second head would comprise especially the conservation and regeneration problems of agriculture and forestry. "Nature changes quickly in the Tropics; whereas it may take twenty or thirty years of faulty land utilisation in temperate climates before serious erosion becomes manifest, the same result is achieved in one-tenth the time in the tropics. It must be admitted that no agricultural system except shifting cultivation has yet been devised that will ensure lasting stability and fertility to tropical forest soils under human management. Shifting cultivation means a nomadic existence for the inhabitants, a low and static standard of living, and requires wars, feuds and epidemics or a

strictly enforced policy of birth control to prevent the population from increasing beyond the limit supportable under the system.”¹ Such is our problem.

Obviously when any settlement is being founded, the soil management system must be based on an exact knowledge of the soil as it is originally. The most careful and exact survey should be made of every type in the area concerned, soil profiles photographed, structure and grain examined, humus and chemical content all noted, recorded and filed. Only by keeping such an exact chronicle of the state of things before we begin work can the results of the various methods of cultivation be satisfactorily controlled. In the forest work also the need for close observation, experiment and record is equally great.

It is not necessary for us here to go into great detail. What we wish to point out is the very real need for order and system if development is to be wise. The results of the work should be controlled by scientific research and checked by constant observation and experiment. Under present methods this is nowhere being done.

The finance for this should be provided normally by the subsidiary Authority for its own territory. The science needed to conserve and rebuild the soils we use should be a normal depreciation charge on any enterprise, as it should have been in the past. There would, however, be in our full scheme a place for a central research fund which would be in the charge of the Institute controlling the region, in this case, no doubt, the Imperial College of Tropical Agriculture at Trinidad — for Agriculture, and the proposed Institute of Forestry, to which we have already referred. These funds would be used for paying for special research into any points of more than normal interest or difficulty, or of great importance to countries outside that of the particular Authority concerned. Wide discretion should be left to the Principals of the Institutes of each region.

We must once again remark that the best results will be won by a system of world-wide cooperation and team work, whereby the results of all stations and all experiments were constantly made available to all other research stations and Development Authorities.

¹ G. V. Jacks and R. O. Whyte, *The Rape of the Earth*, p. 103. (Faber & Faber.)

Furthermore, such work on the purely productive side will only be able to give its maximum utility if it is constantly linked to research on the consumption side. The needs of industry must continually be studied, and such information be constantly available to the Institute which is studying the problems of production. This is, of course, the task of the Central Information Bureau in London.

§ 2. *Forest Plan*

British Honduras has always been famous for its mahogany ; but that it still exports it is due more to luck than to foresight. C. Hummel, in his Report in 1921, declared that in the existing conditions one good mahogany tree per acre was a satisfactory state of affairs, but that this fact showed that the Colony had been living on its capital. In fact, the original capital stock of mahogany had gone for good ; and the survival of the forests is due to the following " fortunate " circumstances :

- (1) Bad transport conditions, — the logs have been normally floated down on the " top-gallant floods " which occur once a year.
- (2) The system of shifting cultivation, only pernicious in the tropics with an increasing population and rising standards of living, is known here as " milpa ". In British Honduras it has not succeeded in ruining the forests owing to the fortunately ridiculously small size of the population.
- (3) Under the " Scribener-Doyle " rule, the American mahogany companies exclude from merchanting all small logs below a certain measurement.

It is, therefore, rather disturbing to find in the Colonial Office Report for 1938 that " in recent years there has been a considerable increase in the over-exploitation of the mahogany forests by the removal of small and immature wood ".

The happily stagnant character of the mahogany industry up to 1920 is shown by the fact that exports in that year at just under nine million superficial feet were a mere 100,000 square feet above the average for the previous twenty-five years. Under conditions existing at the time of Hummel's Report, one million acres were required to produce 25,000 tons of timber, whereas, under proper

management, the same quantity could be obtained from 100,000 acres.

The root of the trouble lies in the fact that the mahogany forests which are worked and are most accessible are in private ownership. One private owner at least — thanks apparently to Hummel's initiative — is making a conscientious effort to secure a sustained yield ; but other owners, who bought their land cheap on a speculation for a rise, have been content to sell the wild products of different kinds for an income. In many cases their form of tenure does not stipulate for development.

The fact of the matter is that long-term forestry policy, which alone can take care of forest conservation, is not suitable for private exploitation ; it needs ample capital and the power to wait for results. Forestry is widely recognised as a subject for a State organisation with a long life.

When Hummel wrote in 1921, there was actually no Forest Department ! This, again on his initiative, was established, and the forest interest is now looked after by a Forest Trust which ensures continuity of policy. A great difficulty appears to lie in inadequate staffing of the Department. A first-class staff is as important as adequate capital. But this cannot be secured where forest management has to be financed out of revenue. It is true that a loan of \$250,000 was contemplated, but in 1925 it had not been used, apparently, owing to staff difficulties and the consequent hampering of development. The mahogany resources of the Colony, in spite of the criminally wasteful and short-sighted methods of the past, are still an asset. When it is remembered that mahogany, and especially British Honduras mahogany, owing to its technical qualities, is the best material for aeroplane propellers, the importance of preventing selective exploitation from destroying this asset is at once apparent.

What, then, should be done about it ?

In the first place, and emphatically, the State — or an organisation representing the State — supplied with ample funds, should take over the entire forest resources of the Colony and treat them as a whole on a well thought-out long-term plan. It is impossible to escape the conclusion that this would necessitate buying out privately owned estates, if only because many such estates — being most easy of access — block approaches to

Crown forests. The question of securing river landings for the latter is bound up with this, and with the question of what method of transport is envisaged.

In the second place, no time should be lost in carrying out a survey of the country ; — aerial, geological, and of the soil. This would have two phases : first, a rough general survey of the forests as they exist at present, showing the classes of timber, the stands and the type of land ; speed being of the essence of the contract. Secondly, the establishment of a methodical and accurate survey in each department. The point of the quick survey would be to provide material for roughing-out a general forest plan, and the importance of speed is that this plan would have to be related to provisional plans for agricultural settlement, and a transport system for the whole country. Transport has hitherto been mainly by water, which is a slow method, unsatisfactory, chancy and bad for the logs. It has been suggested that railway transport might prove more efficient.

It would, moreover, be necessary to set up research organisation from the start. The forest officers themselves have no time for this work, and with anything from 500 to 800 different species of trees, the field is unlimited. Research, for instance, is required into the rate of growth, because a knowledge of this is essential in formulating plans, not only for exploitation but also for transport. We do not know the regeneration period,¹ the optimum number of trees per acre, nor the most economic age at which to cut. All these will vary with the climate, the soil and the tree. Only by careful records kept over a very long period (perhaps up to a century) shall we ever get the exact information needed for a sound system of forest control.

Subject to what research, survey and a long-range plan — carefully matured — might suggest, steps could be taken, immediately control was established, to improve the existing position of mahogany in two directions. By cutting climbers, the growth of the maturer trees would be improved, and by cutting out other kinds of trees overshadowing mahogany saplings, the relatively rapid rate of natural regeneration in British Honduras would be enhanced. (Incidentally, that rate is an additional factor which has served to postpone the destruction

¹ A mahogany tree grows to merchantable size in eighty years.

of the forests.) Care would, however, have to be taken not to carry this cutting so far as to deprive the young growth of the "half shade" which it needs at first.

The cutting of these other woods could be worked in with plans partly to utilise them as firewood for any railways constructed under the transport scheme, and partly to develop timber-working industries. It is an astounding fact that places on the coast of this natural storehouse of timber have been supplied with timber requirements by *import from the United States* ! The local saw-mills have not, apparently, commanded enough capital to install the machinery needed to turn out the necessary shapes and sizes. Here, as we have pointed out, is an obvious case of a secondary industry that could be started by the Development Authority.

Another point in the initial procedure would be the gradual concentration of the working forests in localities easy of access to points of shipment, pending the working-out of the long-range transport scheme.

Where so much could be done to develop uses for various woods, other than mahogany, — sapodilla ("chewing-gum" tree) for sleepers, nargusta, santa maria, red yemeri for boards, walnut for cabinet work and so on, — details cannot be entered into ; but it is perhaps worth while specially mentioning the pines, because they cover some one-third of the entire area of the country and occupy ground which is largely useless for other purposes. They have, moreover, a plentiful natural reproduction which, however, has been hampered by indiscriminate and too extensive burning of the grass, such as it is, which is available in these areas for cattle-grazing. With protection from fire, which — where necessary — should be controlled, pine forest, properly managed, should produce from half to one ton of timber per acre per annum. A simple sum will give the total possible annual output.

There is a point which affects the extraction cost of timber, apart from transport costs. If a systematic scheme of development and conservation for the forests as a whole were established, and uses for the secondary timbers were found, the forest workers, who take a pride in their calling, when not required for felling the main crop, could be employed in the work of regeneration and in subsidiary industries.

As to markets, reference has already been made to the demand for mahogany for aircraft propellers, a fact which has been a good advertisement for its technical advantages in other uses. One important feature of forest policy should, as suggested, be the development of an internal market for woods of other kinds ; while the insistent demands for wood pulp and constructional timber, hard and soft, not to mention requirements of timber for cabinet work, veneers and so forth, indicate directions in which a sustained yield, resulting from scientific management, could be profitably employed.

This summary sketch only touches the fringes of the subject, but the evidence all goes to show the urgent necessity of establishing a comprehensive control, and long-range policy under state-sponsored authority.

It is impossible, in the circumstances of the present war, to assess the present position in the absence of the latest information. But, unless comprehensive conservation measures have been taken, of which we have no evidence, the war demand is only likely to be aggravating the conditions described. That this may in fact be the case is rather suggested by the following extract from the *Crown Colonist* for December 1941 :

“BRITISH HONDURAS. *Forestry*.—In spite of war conditions, there was in 1940 continued improvement in the Colony's export trade, and particularly so for forest produce, which accounts for some 80 per cent of total exports. This improvement was due to the increased demand for mahogany and chicle and the comparatively slight disruption of communication with North America, which has for many years absorbed a considerable portion of the forest exports, and to the purchase of the whole of the mahogany lumber output by the United Kingdom Timber Control Department. The employment given by forest work and industry to signed labourers exceeded the amount in 1939 by nearly 50 per cent. A considerable advance was made in the better construction of mahogany extraction roads by the use of ‘bull-dozers’ and more careful alignment of truck passes, which permitted the extended use of motor trucks and trailers and very definite increases in speed of extraction.”

§ 3. *Agricultural Settlements*

In the past it has been too easily assumed that tropical soils are rich, and that there is no need to give much attention to the maintenance of fertility until they have been under continuous

cultivation for many years. No greater error can be imagined. In general it can be said that, while few soils are rich and many lack essential elements of fertility, all are liable alike to rapid deterioration. In the case of British Honduras the native system of shifting cultivation, while a wasteful method, does avoid some of the worst forms of damage so long as the population remains scanty. It should be regarded as an implicit recognition by the native inhabitants of the fact of deterioration. It must be one of the prime aims of any scheme of orderly development so to control the methods of agriculture that, under continuous cultivation, fertility is not only maintained but actually improved. While it must be admitted that no actual proof exists that this is possible under tropical conditions, we believe that it could be done ; but it will only be done by continual experiment and careful control by experienced and highly trained agricultural advisers, who are in close touch with the cultivator, and who are able to teach — and if need be to enforce — sound methods of cultivation.

Shifting cultivation cannot be allowed to continue while rapid forest and agricultural development is taking place on a considerable scale. If the natives are confined to reserves and allowed to continue their present methods, the result will be the ultimate ruin of the reserves and an enormous addition to the difficulties of the Colony. The Indians should be induced to settle in proper villages, and taught how to maintain a better standard of living from fixed rather than from shifting cultivation. Ample inducement must be offered and reasonable time taken for their education ; but, when such settlements have been established and opportunity has been given to the natives to settle, then all tree cutting and burning for cultivation must be prohibited and the laws rigorously enforced. Several suitable rotations would be worked out adapted to the needs of each settlement, and their effects observed. Livestock will certainly be required, and compost, possibly on the Indore system, should be added regularly to the soil to maintain the humus content. Probably, however, rest periods will be needed, during which the land will be under some leguminous cover crop such as butter beans, which give a useful food to the farmer and form a very dense mat of foliage. The soil is thereby protected from the

heavy rain, just as it is by the forest, and much humus is added. When these were to be ploughed in, high clearance disc ploughs would be required, which might well be owned by the cooperative society of the settlement or hired out by the Development Authority to its tenants. The state of the soil should be regularly compared with the original condition when cultivation started, and so changes likely to be harmful would come under observation and remedial measures could be taken in time. The exact effect of the different methods employed would thus be known, and gradually a technique for the maintenance of fertility would be evolved.

The shifting and scattered nature of the population is a very real handicap at present to any programme aimed at the betterment of their conditions. It is interesting to note *The Report on the Economic and Natural Features of British Honduras*,¹ in the section by Dr. Gann, the P.M.O. of the Colony :

“ Tuberculosis, dysentery, and malaria, like hookworm, require for their eradication that the people should be properly educated in the methods, first of avoiding them, and next, of treating them. This is no easy matter amongst the very poor and ignorant section of the population, who are frequently scattered over wide areas in little villages, banks and settlements, unhealthy and insanitary to live in, and difficult to get at ; yet, if the health of the people, and especially of the agricultural section of it, is to be improved, this is a task which must be strenuously taken in hand.”

If the native could be induced to settle in fixed and more easily accessible villages, with the object of putting an end to shifting cultivation, the doctor's task also would be simplified.

As we have pointed out, it is not too much to say that fortuitous circumstances alone, and particularly the extremely small numbers of the population, have saved the forest and the soils of British Honduras from destruction. But in view of the serious overcrowding which exists elsewhere in the West Indies, we can no longer contemplate with equanimity the spectacle of empty lands lying unused. Apart from the possibility of a very considerable improvement in the forests, we consider that British Honduras would undoubtedly be able to support a large agricultural population, and offers considerable scope for immigra-

¹ By W. R. Dunlop, 1921, p. 31.

tion. There should, of course, be no thought of hastily throwing open large areas of lands for haphazard development by any means at the immigrant's disposal.

Agricultural development should from the first be on a well-considered plan. It must be controlled with the aim, in the first place — as we have pointed out — of ensuring that the soils are not destroyed, and, secondly, that only such crops are encouraged as are useful for the subsistence of the cultivator, and the surplus of which will be likely to find a ready sale in the world's markets. No hard-and-fast rules can be laid down ; the very essence of success will lie in careful study to devise flexible methods to suit the varying natural conditions. It should be a major aim in the economic policy of agriculture to avoid too great dependence on any one crop, and to build a widely diversified system.

The initial experiments would have indicated suitable soils, and several settlements, with resident agricultural officers in charge, could be started at once in various parts of the Colony, each with a different method and different export crop in view. One might have, in addition to its subsistence crops, the production of pea-nuts ; another would look to beans and maize ; another might be based on a plantation which produced sugar ; another might experiment with castor oil, or, near the coast, copra. This will not only be helpful to the soils, but will also avoid great fluctuations in the fortunes of the Colony. Every effort should be made to get variety by fitting the crops and methods to the conditions. In the soil survey ¹ soil types will be studied individually and in connection with the natural features of hill, valley or plain where they are found, while the claims of livestock and composting should be met.² Forest would be retained on all steep slopes to avoid erosion, and large blocks should be kept interspersed in the cultivated areas to act as wind-breaks to retain moisture and provide fuel. When immigrant peasant colonies are being formed, these would probably be best grouped around an agricultural station, a market, a school and a dispensary. As the settlement grew, active exchange should be encouraged within the community. Each farm, and each farmer, will have some special aptitude which can be of use. Village industries could be started to supply the needs of the locality.

¹ See p. 41.

² See p. 47.

There would be the local blacksmith and carpenter to make simple furniture, — a small mill to grind maize, etc., — the local garage and transport agency. It may be that small cooperative societies could then be formed for purchasing the needs of the community and for marketing their export crops where the Development Authority did not undertake this. While it might be best for the Authority to market the main crops, there will always be small side lines which the individual should be encouraged to try for himself.

It is in the forming of these into a steady source of wealth that the cooperatives could help. These are of the greatest value in the education of the peasant in the study of his problems for himself, and in leading him to understand his position in the Empire and the world.

It may well be found that European-owned plantations can be fitted into the scheme of things. A great deal could be done to help the farmers who are at present trying to develop their land under great drawbacks. Cheaper credit could be found, assistance could be given in the marketing of their crops and in the purchase of machinery. Advice would be available, and the increase in the general activity of the life of the country — due to rising purchasing power and the influx of new capital — would of itself give them very considerable help. In suitable areas, blocks of land should be kept available for the individual cultivator who did not want to be in one of the assisted settlements. This could well be in broken country, where a number of individual farms could be found, but where the large blocks needed for a controlled settlement were not available. An opportunity would also occur near to forest headquarters, where a number of workers would be employed, and so a local market would come into being for a small quantity of produce.

The general principles which we would wish to see observed may be enumerated.

- (1) Survey of soil types.
- (2) Determination by experiment of the suitability of the soil for agriculture, and the rotation and methods of cultivation which suit soil, climate and topography the best.
- (3) Introduction of suitable agriculturalists.

- (4) Their education and continuous direction and control of the whole experiment.

§ 4. *Geological Survey (Prospecting)*

We have already seen that, as yet, no proper search has been made for mineral in British Honduras. It will be of the greatest assistance to the proper organisation of the development of the Colony, and most particularly of its communications, if a better idea could be obtained of its mineral potentialities. With this in view, we have advised the immediate setting-up of a Geological Survey, and it may now be of some interest to consider in more detail the methods which could be employed to get this information as quickly as possible.

Two areas have already given indications of the existence of gold. In Mullins River, some years ago, a quartz boulder was found which is said to have assayed 6 dwts. This river comes from an area where a granite intrusive has crushed and folded the older sediments, which are much metamorphosed and mineralised in the vicinity. Such areas are the traditional sites of mineral discoveries. One prospecting party should, therefore, be sent to this district, and a good base camp built at some convenient place. From this camp a systematic examination of the whole periphery of the granite must be made. The mineralised area may be several miles wide ; other granite bosses may be discovered in the process, or mineralised country where the granite has not yet been exposed by erosion but where it is not far from the surface. It is probable that in this vicinity at least 100 square miles of country will need the most careful examination. This is all covered with forest ; it is probable that rock exposures will not be too common or easy to find ; much of it is hilly, and it can be confidently said that the work will be slow and exacting. Rivers and streams will need to be pitted and the concentrates examined ; where signs are encouraging, the hill-sides should also be pitted and quartz reef or other mineralised rocks should be assayed. Stann Creek lies on the other side of this granite, and as manganese has been noted in the soils of the district, careful examination should be made for deposits of this mineral. Tin has been remarked, and copper, lead, zinc and silver are also possibilities.

Another area which merits immediate examination is the igneous complex which lies at the south end of the Maya mountains, near the headwaters of the Rio Grande. Here also quartz has been noted which carries some gold, and a similar procedure should be followed ; a base camp should be formed and the whole area systematically examined. The area concerned is even larger than the Mullins River block, as the igneous intrusive here is a complex of ash beds, porphyries, etc., and itself would require to be examined. Probably over 200 square miles will be found to be of interest.

The Cayo district has yielded traces of tin and gold, and these require to be followed up-stream in the endeavour to find the source.

In all these cases attention will have to be given also to the possibility of alluvials existing down-stream, and if there were indications that these might be of interest some drilling might be necessary.

Three field parties are therefore envisaged, each with a gang of labourers to do the pitting, cutting of tracks, and a trained European in charge to direct the work and to test all pits and collect the information and concentrates. If any deposit of interest were found, it should be opened up in the usual way and an attempt made to test its value. When sufficient work had been done, it should be the object of the Authority to hand the deposit over to a reputable mining house for the actual exploitation, retaining naturally a substantial share in the profits.

The Director of the Survey will probably not be able to undertake such field work himself, as many technical and scientific questions, besides the actual supervision of the work in progress, will occupy his attention. He should, of course, visit the field works regularly, but his most important task will be to make further preliminary investigations to decide what other areas of the Colony merit detailed examination. Many interesting possibilities are to be expected besides the already known mineralised country in the Maya mountains. The Agricultural Department will require large quantities of lime, and suitable deposits should be noted for exploitation as required. "Laterite" is known to occur in parts of the country, and the existence of bauxite would be possible. The presence of manganese has

already been noted in many places, and as this mineral is very likely to escape the attention of many even trained and experienced prospectors, it should be kept very much in mind by the Survey.

In this way, at the end of three or four years' work by the three field parties and the preliminary examinations made by the Director, a general survey of the country could be made. It would then be possible to decide what prospects there were of discoveries of payable mineral, and the nature of further work determined.

It is usually considered desirable that a Geological Survey should exist simply to advise and give scientific help to the private prospectors and the mining companies, and not to engage in prospecting and development operations itself. In the case of British Honduras, however, no mining community exists, and therefore it would seem to be necessary for the Development Authority to do the work itself through its Geological Survey, which in this case would be a department of the Authority and not of the Government. It would probably, therefore, be advisable to close the country to prospecting while the Survey was working, and to give the Authority sole rights for a defined period. No hardship would be caused to anybody, and the Survey would not be hindered by individuals following at the heels of its parties with the object of profiting by the discoveries they made.

It should be stipulated that when the Survey had completed its work in any areas, it should immediately throw them open to prospecting and make a full report of the general formations and of any occurrences noted of valuable minerals. The best men can easily miss mineral deposits, and many countries have been judged by good engineers to be devoid of interest, where subsequently valuable mines have been discovered by men with far less qualifications. It might also be the case that small deposits will be found not suited to company operations, which would, however, yield satisfactory results to an individual or group of individual workers. Such could be leased on easy terms by the Authority or on tender.

In general, then, it would be the object of the Authority to do the initial prospecting as an exploration company ; this

because there is no mining community in the Colony. As soon as the period of prospecting was over, the Survey would simply undertake the work of a normal Government Department the strength and constitution of which would be determined by the results obtained in the prospecting period.

§ 5. *Communications*

The Aerial Survey would, of course, have as one of its prime objects the reconnaissance of the best routes and methods for the development of road, rail and water transport. In the meantime, the transport projects, which are at present under way, should be rapidly completed and fully equipped to deal with increased traffic. Road communications are an absolute necessity before any advance can be made, and the absence of such would immensely hinder the work of the various surveys which were trying to work out a plan of further development. The work now being done on the main rivers could be extended ; these would long remain important links in the chain of communications even if, later, railways were to be constructed.

The following roads should be completed at once :

- (a) The road to Cayo. Fifty miles of " dry weather " track have been built from Belize towards Cayo ; but it was reported in the Colonial Office reports for 1936, 1937 and 1938 that a further forty miles still remain to be constructed before this road is complete for motor transport. This should be finished at once and made into an all-weather route. It would seem to us of the very greatest importance to do everything possible to improve and develop the transit trade with Petén.
- (b) The main road to Corozal also should be completed and made into an all-weather route. It should be extended to Consejo ;¹ and branch roads driven to points where contacts can be made with centres of population or with trade routes from over the borders of Mexico. Even where merely a dry-weather track was constructed, permanent bridges should be built and their approaches metalled. These can be cheaply constructed, on the subsidiary roads, of hardwood

This has now been done.

- baulks set in concrete piers with a rough timber decking ; they will immensely increase the utility of a dry weather track.
- (c) The road to San Antonio will be completed this year (1939) as funds are available from the Colonial Development Fund. It is twenty-one miles long, and ten miles were reported as completed in 1936. Extensions and branches should be built to open up fertile areas and enable the starting of agricultural settlements. This area is one of the most fertile in the whole country and contains the very important and interesting Maya ruins at Lubaantum and Xumucha. Roads should be driven to these ruins, and a Rest Camp established somewhere in the vicinity so that visitors may be attracted.
- (d) Attention should be given to the possibility of a road to open up the hilly country to the west of the Maya mountains, and to connect this area with the sea and with Cayo and with San Antonio.
- (e) There would seem a possibility of a road to connect the pier at Commerce Bight with the Belize-Cayo road now under construction. This would pass via Middlesex, and would not only open up a fertile and mineralised area, but would also touch some forest country hitherto very inaccessible.

Port and harbour development would form a large separate question, bound up with the problem of the site of the capital ; if Belize is retained, despite the many grave disadvantages under which it suffers, then deep water facilities will one day be required. In the meantime, careful consideration must be given to the opening-up of new facilities for coastal traffic by short roads inland, and by the improvement of the existing piers, etc., along the coast. This is, however, simply the necessary " tinkering " prior to the preparation of a considered plan for the development of the internal communications of the Colony. We have already shown how the forest and agricultural officers and the geologists will be examining the country, and working out how it may best be developed. When their preliminary plans are known, and some estimate can be made of the quantities and classes of goods which are likely to be seeking a market, then consideration can be given to the question of road, river, rail and port development on the long term. The railway men need to know what traffic

is seeking an outlet, and what funds are available. The forest officer cannot consider developing fully some of his lands, perhaps otherwise admirably adapted for his works, until he knows what transport will be available and whether he can find uses for his waste products as fuel. The agricultural officers, also, cannot consider bulky crops such as maize — which might otherwise be admirably suited to certain of his areas — if he has to take into his costs an item of long road haul to the coast. But when the railway man sees that a district would provide bulky crops at certain seasons, and a constant stream of timber and fuel at all times, he can then make plans for developments which neither would justify alone. Furthermore, a prosperous mining or an agricultural community will give traffic to the railway in both directions.

The railway will be vitally affected by the question whether any considerable traffic is likely to be developed with Petén and Quintana Roo. Here, cooperation with Guatemala and with Mexico will be wanted, and once more there arises the need for doing all we can to organise the concerted development of the entire geographical region.

§ 6. *Secondary Activities : Town Planning and Immigration*

The Authority should consider the possibilities of all manner of local industries. Saw-mills would naturally come under the forest planners and need not be further discussed, but furniture trades, local boat-building, etc., might well receive greater attention than at present. The Agricultural Department will require lime ; good hotels should be established in various localities, and, with the advent of the motor roads, where there were no hotels, Government rest camps should be built. Such work is not expensive and contributes in no small manner to the opening-up of the internal trade of the country. The supply of machinery on hire purchase terms to the sugar planters and other local farmers should all be part of the normal functions of the Development Authority. Processing of local products for export, soap manufacture, oil pressing, etc., may be worth starting. All the possibilities for small local manufactures to supply goods for local consumption or trade with the interior are worthy of being considered. When the plans for development were under way,

it is probable that considerable interest would be aroused abroad, and more especially in the United States. Every effort should be made to give the work adequate publicity and increase this interest. Tourists should be encouraged in every possible way, and for this roads and accommodation are an essential. Tourist routes to the interior should be surveyed, scenic beauties noted, the ruins of the Maya¹ civilisation opened to the visitor and good museums established. The relative isolation of British Honduras must be broken, and for this, in our days, good airports are another essential.

The possibility of fishery development should not be forgotten, and one member of the preliminary survey might well be a fishery expert. Financial assistance in the purchase of boats and gear might be given, and active assistance to the founding of a new industry. The shark skin, sponge, tortoise-shell, salt and canned fish industries, and the salt extractive possibilities, should all receive attention. In addition, it will be possible to encourage the internal market when roads are opened up to the interior. Ice plants would then be a necessity.

Probably the greatest immediate benefit, however, would be likely to accrue from a tourist industry. For this, thought might well be given to the big-game fisherman. Camps could be established cheaply on cays where sport was to be had. There would seem to be no manner of doubt that a virgin field for excellent sport is to be found on the coasts of the Colony, with great possibilities of profit for everyone concerned. Not only the direct immediate profit of the industry is important, but even more the indirect use in attracting the interest of wealthy and intelligent men to a little known part of the world. It has often been the case that men who came for sport, and who went away satisfied with the country, came back again for other reasons when an opportunity to do business occurred. An important mine, now being developed in Kenya Colony by Canadian capital, is a case in point. But we would emphasise that—if there is to be a possibility of such results—the sportsman must feel that he has had a fair deal, he must be satisfied; and for this, adequate

¹ British Honduras provides exceptional opportunities for intensive study, as it "contains within its narrow limits remains representing every phase of Maya civilisation from the earliest to the latest". See *Maya and Mexican Art*, by T. A. Joyce, O.B.E., 1927.

preparation is required and his wants must be carefully studied. Hotels must be able to give reasonable comfort, and medical attention should be good.

The impression which is given by the towns is also important from every point of view. The capital must give the impression of being business-like, at any rate clean and modern. If Belize is to be kept as the capital, it would be necessary to start comprehensive measures of drainage at once ; sewage disposal, sea-walls to give protection from hurricane damage ; port works, hotels and hospitals should be enlarged and modernised, and the swamps pushed far back from the town.

In any case a hill station, somewhere high and healthy and on the drier western slope of the mountains, would be a necessity. If the site were well chosen, a start might be made with a rest-house built of local timber, a small golf course and tennis courts, etc. This would become the natural centre of the western slope, and of any developments which were found feasible there.

This Colony is not likely to prove a home for any large number of white inhabitants, except, perhaps, for mining men, the commercial community, planters, experts and Government servants.

Consideration might be given to the possibilities of immigration from India or China. But, if the geographical situation and the bad state of overcrowding — which exists in the West Indian Islands — are taken into account, it might be very convenient for them to look to their neighbour for some relief from their troubles. It must also in justice be remembered that many of the troubles of the West Indian are the direct result of British policy in the past.

If the plan of development which we have started to outline were to be put in action, large numbers of labourers would be wanted who could not be provided from the present inhabitants. Road work, the clearing and building of the agricultural settlements, the new forest works, geological survey, hospital, township and port developments will all demand workers. Government policy should aim at bringing in such labour from the overcrowded areas in the West Indies, and these should be selected in cooperation with the Governments of the islands concerned, so that men should be sent who were likely to settle down in

their new country when their work was completed. They should be, as far as possible, agriculturists who could be usefully included in the settlement scheme.

Many European officers will be required. It will not be necessary to have all highly trained men for the routine work of the establishment and the supervision of the settlements. A man who was really interested in this class of work, and who showed tact and good sense in his handling of the peasants, would be of more use than a mere expert agriculturist less able to teach other men. They should, of course, all work in close touch with the specialists of the Agricultural Department, and they might well have had a short special course in their work at, say, the Imperial College of Tropical Agriculture. Active enthusiasm, the capacity to lead and teach natives, initiative and common sense, ability to tackle the many and varying practical problems of the development of a settlement from bush, will be the most needed qualities of all.

It would seem likely that such men may find themselves unemployed at the end of this war. An active policy of colonial development along these lines would be no small aid to the problems of demobilisation.

III. FINANCE

§ 1. *General Considerations*

We will assume, to simplify the examination of the Finance method, that the Imperial Development Authority forms a subsidiary to be called the British Honduras Development Authority. We estimate that it would require a capital of £5,000,000 in ordinary shares, which will all be held by the Imperial Development Authority. There would be no objection to the Colonial Government taking up shares, if it is so desired, in exchange for land, which it contributed, and for any port installations, etc., which it might cede. But, for simplicity in setting out the estimate, we have not shown this provision. The Authority would also have certain Free Grants, which we will explain later, and would be supplied with Loan Capital, as required, by the Imperial Authority at rates to be governed by Empire conditions.

The British Honduras Development Authority would be able to make grants and loans to the Colonial Government, to buy land and to develop this and the forests ; to start agricultural settlements, to build roads, railways and ports, and to engage in mining and any other form of business which it was considered desirable to undertake. Its object, however, is not to compete with private enterprise, but to open up new businesses which the private entrepreneur had not attempted. It is to do work which, to a very great extent at present, neither the Government nor private enterprise has been able to tackle. It would be specifically charged with the carrying-out of the scheme of development, when this had been drawn up and approved by the Imperial Development Authority, the Secretary of State for the Colonies and the Colonial Government. It should not, however, be regarded as a charitable institution which existed to relieve the inhabitants of their normal responsibilities for the ordinary functions of government. It is there to help initiative, not to supplant it.

The Authority will, therefore, be justified in granting or loaning money to the Government on easy terms for educational or medical works of an exceptional nature. For instance, a direct benefit to efficiency might be felt from a quick and concentrated attack on certain diseases¹ and prejudices, *e.g.* hookworm or malaria, tuberculosis, etc., and the prejudice which exists against vegetables and fruit as articles of diet, due partly, perhaps, to ignorance of the proper methods of preparing them. Buildings, permanent staff and equipment should more properly be provided by loan funds, naturally at as low a rate of interest as possible. As we see it, the Development Authority would make loans or grants to the Colonial Government for welfare schemes ; actual development of resources it would undertake itself. But the expenditure on welfare is exceptional — limited to specific cases where development would be hindered if the work were not undertaken.

When we come to attempt to estimate what capital would be required, and could usefully be spent on the development of British Honduras, it must be recognised that the Colony is extremely backward, under-developed and poor. The first

¹ See p. 48.

essential would be to consider what ought to be spent, so as to bring the amenities and services of the country up to the minimum which a civilised state should be able to offer to its citizens. This minimum is absolutely necessary before they can begin to make real progress on their own, and is quite apart from the consideration of a large-scale plan.

We imagine that this would be done by a special grant made by the Imperial Development Authority. A skeleton organisation would be set up for this purpose which would also be working on the preliminary surveys and experiments preparatory to starting the main plans.

We will examine the spending of the special grant first, and then go on to major plans, though these will, of course, be going on concurrently and will necessarily overlap to a certain extent. We are trying to illustrate a method of attack on a problem, and not the exact figures of the sums which will be required if such ideas were ever to be employed.

In general, while our idea is that in a backward Colony the Authority, organised locally by the parent Authority, should have a wide discretion in the employment of its funds for the very purpose of ensuring continuity and comprehensiveness in the forwarding of its objects, we bear in mind that these funds — as will appear — are provided with the backing of the Imperial Government and under proper safeguards. Further, the scheme of development, within which the Authority will work, is one framed and agreed by the Imperial and Colonial Governments on the initiative of the Imperial Development Authority, and, in its execution, the Colonial Government will be effectively represented, almost, as it were, by going into Committee of Supply. Our conception is that the Authority should become a flexible and efficient instrument for development and welfare in close liaison with the existing colonial administration and that a spirit of disinterested cooperation should be regarded as a fundamental requirement of the venture. The Authority will be there to do a specific part of the work of government, which, in our view, it is best fitted to do in such a case as that of British Honduras. This being so, it will not be liable to taxation, as a private corporation would be. It would have its own finance, but its operations would be calculated to swell the ordinary

colonial revenue. Moreover, they would, both through the special grant and the long-term scheme, further the ends both of development and welfare.

§ 2. *Estimate of the Special Grant*

FIRST YEAR

The present forest and agricultural experiments should be continued and their scope enlarged ; direct aim being permanent improvements and discovery of new resources .	£35,000
Subsidy paid to Government Medical Department for a campaign against hookworm, malaria, etc. ; institution and improvement of local dispensaries, education in elementary sanitation, etc. This would be directed by a staff of doctors engaged on a three-years contract. They would not only train dispensers and treat cases, but would institute propaganda against conditions which meant relapse, start latrine campaigns, better housing demonstrations, food preparation, etc.	50,000
The greatest benefit from such a campaign cannot accrue while many small communities remain isolated in the bush. It would therefore be an objective of policy to bring such into reach of communications, and small settlements should be started, demonstration farms established, etc.	50,000

Road Developments

(i) Complete Corozal and metalling	} 130,000
(ii) Cayo completion and metalling	
(iii) Stann Creek completion and metalling	
(iv) Extensions from Cayo, dry weather only	
(v) Extensions from Stann Creek road to join the Cayo-Belize road, dry weather	
(vi) Branch roads around Punta Gorda, dry weather	
(vii) Baranco to border, dry weather only	

River Development

Belize River, continuation of works and the survey of other rivers and preliminary works	10,000
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Port Development

Survey of the port of Belize, and of the other ports, and preparation of estimates for their improvement, small preliminary works	5,000
Preliminary works for drainage scheme for Belize, hurricane protection, etc., and the institution of a small Hill Station	20,000

Total . . . £300,000

SECOND YEAR

According to our ideas, the planned development would be starting in earnest this year, but for convenience we are keeping

the expenditure under the Special Grant quite separate. It would be a separate programme, and is needed whether there is large-scale development or not.

Continuation of the agricultural and forest experiments .	£30,000
Road maintenance and extensions, and minor river and port works	50,000
Medical Department : continuation of programme .	10,000
Native Indian Settlements : continuation of programme	10,000
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Third year expenditure the same as the second	£100,000
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Total spent on the Special Grant	£500,000
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In the fourth year, under our programme, work would be going on smoothly according to the plan of development adopted. Experiments would need to be continued, but would be gradually worked into the regular routine of the Departments of the Authority.

§ 3. *Expenditure on the Development Scheme*

It is, of course, impossible to work out any detailed estimates of expenditure under a plan until we know what the plan is to be ; but what we must attempt to do is to show the order of magnitude of the ideas which we think could be worked out in the Colony with advantage. The Authority would start by buying up from the private individuals and companies concerned the lands and concessions which it needed. The Government would cede to it the remaining Crown lands. It would not at first aim at buying in the whole Colony, despite the many theoretical advantages of such a plan. We think, however, that it would be sufficient for it to start with large blocks to enable consistent development to proceed, and to make it economical to employ big capital. Power should be taken by the Colonial Government to acquire lands compulsorily at figures to be agreed upon by arbitration ; otherwise the success of the schemes might be endangered by a recalcitrant individual, or by unwise development or neglect in neighbouring areas. These powers should be taken at once and not simply when required ; they may never need to be used, and the very fact that they were in existence would — in all probability — obviate the need for their use. The large companies have done something to try to develop

on sound lines, and as credit should, therefore, be given for the effort made, the ordinary shares of the companies should be bought up at a figure which took this into consideration. Land-owners who have shown foresight and public spirit should benefit from this. In general it might be found that, by working on a basis of twenty years' profits as a purchase figure, considerable blocks of land could be acquired. We have set aside the sum of £1 million as a reserve for land purchase, and with that it should be possible to get a sufficiently large area for the authority to start work.

Capital will have to be found to continue the operations of timber extraction, and it is difficult to make any estimate for the working capital which will be wanted for this forest development, until expert examination has been made and a comprehensive plan worked out. Experiments would have to be started and results awaited.

Agricultural settlement will be pushing forward and immigration begun. To some extent this settlement would be made by groups in specified areas, and the roads and buildings would in part be put up by the immigrants themselves. Housing in Antigua, on an approved scale, cost £122 per cottage; and, if purchases of material were made on a large scale and timber from clearings were utilised and cut up by portable saw-mills — run by the Diesel tractors which were also employed on road grading and the preparations for the settlements —, it would seem that considerable savings could be made. The British Guiana Refugee Committee reckoned that refugees from Central Europe might possibly be settled in that country for about \$1500 to \$2000 per farmer, this to include house, farm buildings, fencing and farm stock, seeds and implements, together with the cost of living for two years. It should be possible to settle West Indians in British Honduras for much less. We have made an estimate of about £300 per farmer and his family, excluding the cost of preparing his land for the first crop. It would seem likely that an area of at least twenty acres of arable land would be required for each farmer if a reasonable standard of living is to be attained, and this would be exclusive of grazing and waste land for extension to those who desired more scope. Half could be ploughed up and put under cultivation in the first two years, and the rest

he would bring under himself as circumstances allowed. The first settlements would, of course, be much the most expensive, but, with the experience gained and the capital equipment purchased, extensions should be possible at considerably less cost.

The methods to be employed in bringing the land under cultivation would have to be governed by the character of the soil and the bush. Where there was much big tree and hardwood forest to be cleared and many roots would be left, or if the soils were very shallow, it would be inadvisable to plough with tractors. In such areas the stumps would be burned, and ploughing done around them with light ox ploughs. The farmer would grub out such as remained at leisure. In the case of heavy land with not too great numbers of stumps and roots, tractor work would be much the best and quickest method. Experience alone can decide.

For general utility work such as grading and rolling the roads, transport, logging and stumping, ploughing heavy land and breaking the sod, and for all sorts of general work, where cheap portable power is wanted, tractors of about 60-h.p. caterpillar Diesel type are unsurpassed. These units with their equipment of ploughs, harrows, discs and road-making implements would probably cost — landed — about £3000 each. Excluding the stumping, which would depend on the character of the bush, and also on how much of the work could be done by the immigrants themselves, these outfits would probably be able to break the land and prepare it for crop at £1 an acre, and could tackle some 1000 acres per annum. A convenient size for the start of a settlement would then be a hundred farms of twenty acres each of arable land. Five acres would be brought under the first year and five the second, so as to leave time for the other work the tractors would have to do as well. In East Africa it was sometimes found that several lighter units, *e.g.* the two-ton caterpillar tractors, were more economical in running than one large unit. The capital cost was approximately the same for a given area to be kept under cultivation. It is also often an advantage to have several smaller units rather than one big one, when, as in the present case — for instance — there would be the work of the Experimental Station, roads and clearings to be made, transport, etc.

It might be convenient to start, say, five farming settlements in the following areas: Belize-Sibun area, Stann Creek-Riversdale, Cayo area, Corozal and Toledo areas. At each an Agricultural Station with its resident officer would be needed, and the station would have to be well equipped for experiment and demonstration. If an allowance of £10,000 is made for the establishment of each station, that should cover the needs.

We are now in a position to make an estimate of the capital cost of starting such a series of settlements. This includes the equipment wanted to enlarge the areas considerably, when experience had been gained and new settlers were available. Considerable latitude should be left to the officers in charge of each settlement, to find suitable men and to enlarge the settlements as they had the material and the lands available.

ESTIMATE FOR FIVE SETTLEMENTS

Establishment of the 5 Agricultural Stations	£50,000
Five tractor units 60-h.p. caterpillar Diesel	15,000
Stumping and clearing 5000 acres at £2 per acre . .	10,000
Breaking and discing and harrowing 5000 acres . .	5,000
Main roads for settlement at ten miles per settlement and at £50 per mile	2,500
Internal roads and upkeep, etc.	2,500
Establishment of markets, stores, dispensaries and schools, etc., for 5 settlements	10,000
500 farms with fencing, buildings, implements and seeds and livestock, with living expenses for two years for 500 families at £300 apiece	150,000
Say	<u>£250,000</u>

This figure of £250,000 includes three items of non-recurrent capital expenditure, totalling £75,000 :

Establishment of 5 Agricultural Stations	£50,000
Five tractor units	15,000
Establishment of markets, etc.	10,000
	<u>£75,000</u>

Excluding these items, the capital cost per acre for 5000 acres works out at £35 per acre. When the whole 10,000 acres have been brought in and account taken of an estimated additional expenditure of £25,000 on stumping, discing the ground and

making new roads, etc., the cost per acre, still excluding the non-recurrent items, works out at £20 per acre. This does not seem excessive.

Estimate of Expenditure First Year

Commission of Enquiry to visit Colony, draw up plans and report	£5,000
Agricultural and forest experiments to be begun at once, aimed chiefly at the problems of rapid continuous development	15,000
Aerial Survey of the unsurveyed parts of the country and of key areas, lines of communications, etc.	100,000
Geological Survey, first year expenditure	10,000
Land Utilisation and Natural Resources survey, review of past works, present situation, site of capital, immigration policy, etc.	5,000
Skeleton establishment at Headquarters	65,000
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	£200,000

Second Year Estimates

Brought forward	£200,000
Reserve for the purchase of land now to be made available	1,000,000
Continuation of agricultural and forest experiments	25,000
Aerial Survey completion of areas of importance	50,000
Geological Survey	15,000
Land Utilisation Survey, etc., to be completed	5,000
Road, river and port developments	50,000
Agricultural settlements	250,000
Working capital for forest developments	200,000
Credit for industry	100,000
Establishment of Headquarters, etc.	105,000
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Total to end of Second Year	£2,000,000

Third Year Estimates

Brought forward	£2,000,000
Continuation of agricultural and forest experiments	25,000
Geological Survey	15,000
Road, river and port developments continued	50,000
Agricultural settlements in the Second Year :	
Stumping and clearing 5000 acres	£10,000
Breaking, discing and harrowing	5,000
Upkeep and extension of roads	1,000
Upkeep agricultural stations and markets, etc.	4,000
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	20,000
Credit for industry	100,000
Headquarters maintenance, etc.	90,000
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Total to end of Third Year	£2,300,000

Fourth Year Estimates

	Brought forward	£2,300,000
Continuation of agricultural and forest experiments ; the work under the Special Grant is now to be continued here		55,000
Geological Survey		15,000
Road, river and port developments continued		100,000
Agricultural settlements in the Third Year :		
250 new farms to be started at £300 each	£75,000	
Maintenance of roads, agricultural stations, etc.	5,000	
		80,000
Credit for industry		50,000
Headquarters and contingencies		50,000
	Total to end of Fourth Year	£2,650,000

Fifth Year Estimates

	Brought forward	£2,650,000
Agricultural and forest experiments continued		55,000
Geological Survey		15,000
Road, river and port developments continued		100,000
Agricultural settlements upkeep and extensions		80,000
Credit for industry		50,000
Headquarters and contingencies		50,000
	Total to end of Fifth Year	£3,000,000

It will be noted that the allowance for Headquarters has been diminished somewhat. This is not because the actual cost will be likely to fall between the second and fifth years, but because it has been anticipated that there will be a certain income which we have not taken into account, small in the preliminary period certainly. This will be considered in more detail later.

Of this sum of £3 million we think that £2½ million should be risk capital, represented by ordinary shares, held by the Imperial Development Authority and the Colonial Government, if it decided to participate ; and that £500,000 should be loan capital on which the British Honduras Authority should expect to have to pay interest at Empire rates to the parent Authority from the start. This sum is the total of the working capital found for the exploitation of the forests (*vide* Second Year), £200,000, and the credits for industry, £300,000. This does not mean that we think that only this sum and no more should be found for these purposes ; more should certainly be made available if it can be used ; it is simply to show how the method would work, and that we envisage that money which would be earning its

keep from the start should pay interest to cover the cost to the parent Authority.

As we have already mentioned, there are certain major works for which it is not possible to make any estimate until the Survey has been completed and reports prepared and submitted to the Colonial Government and the Imperial Development Authority. The two most important are the question of the site of the capital and chief port, and the question of railways. These necessarily hang together to a great extent, and also depend on what measure of cooperation was possible with a World Development Authority, for the development of Petén and Quintana Roo. If Belize is retained as the capital, very considerable works will be wanted if it is to be changed into the safe, healthy and commodious capital for the Colony which we wish to see growing. This expenditure would probably be best met by a loan on easy terms to the Colony, interest on which would not begin for some years. The port and railway would, in all probability, be best managed by an autonomous administration financed by the Development Authority.

During the first five years, then, we should imagine that capital of the following order of magnitude would be required by the Authority for the development of British Honduras on anything like an adequate scale :

Free Grant (Special) to the Colony for urgent improvements (to be administered in part by the Development Authority)	£500,000
Initial capital of the Authority	2,500,000
Loan capital authorised, which the Authority can draw upon as required	500,000
Loans foreseen but not authorised until full plans for the capital and railway, port administrations, etc., are completed and passed by the Imperial Authority and the Colonial Government : very rough estimate, say	4,000,000
Total	<u>£7,500,000</u>

THE SECOND FIVE YEARS

The first period will have been rather in the nature of an experiment, and will have given very valuable indications as to what kind of development is likely to yield the greatest measure of success under the conditions of the Colony. It is quite imprac-

licable to make any detailed estimates for the following periods. The results from the experimental works will be coming in, and it will be possible to examine where mistakes have been made and how development can be more satisfactorily pushed in the future. We would point out that, by the methods we have outlined, a steady stream of immigrants will be attracted to the country. The latter would still be very much under-populated and under-developed in relation to its potential resources, but a sound beginning would have been made. We think, therefore, that we might make an allowance of £500,000 per annum capital, *i.e.* in ordinary shares, to be taken up by the Imperial Development Authority. This the British Honduras Authority would be able to supplement by loan capital to be obtained from the Imperial Authority if sanctioned, that is to say if it were considered that this was likely to be a sound investment.

It may be remarked that no money has as yet been allotted to the work of regeneration of the forests. This is because the results of forest experiments will be slow. We think that in the second five years a considerable sum would be available here. The road work would not be costing so much as in the first period, and so we anticipate that about £200,000 should be available under our estimate for purely regenerative work in the forests.

The expenditure which we foresee may therefore be summarised :

Capital of the Authority in ordinary shares held by the Imperial Authority and issued as the money was required :			
In the First Five Years . . .	£2,500,000		
In the Second Five Years . . .	2,500,000		
Special Grant	£500,000	
Loan capital authorised to be taken as required	£500,000
Loan capital foreseen but not authorised until plans completed	4,000,000
	£5,000,000	£500,000	£4,500,000

We do not think that an investment of this order of magnitude, say £10 million in all, is an unduly great sum for the

preliminary development of a Colony with the potentialities of British Honduras. Great openings will have been made for private capital to work, and very considerable secondary development will probably take place. Such development is quite out of the question in the present state of the Colony, nor is it in any way likely to take place unless the whole system of colonial management is radically changed. To give only one example, no development of the motor industry, with all that means to a modern community, is possible without roads. Moreover, a few isolated disconnected roads are not sufficient ; a good interconnected system is necessary, the main sections of which, at least, must be passable at all times and in all seasons.

§ 4. *Income*

The Income of the Authority remains to be studied, and the benefit which Britain stands to gain from this large expenditure. It is our belief that income should be largely obtained from a direct share in the proceeds of the developments, and only to a lesser extent from the interest on loans. For this reason, and for the numerous others we have already cited, the Authority should have a separate existence apart from the existing machinery of Government, embodying a practical business point of view. Its work cannot be fitly undertaken by a Department of the Colonial Government, but its liaison with the Administration generally, both in the region of policy and in that of practical detail, would be close and continuous. At the same time, the aim of the Authority is to build permanent values. It will eschew the quick profits of purely exploitative methods, with the idea of forming a steadily productive land, and a large population with a rising standard of living. Its revenues could come under several heads.

I. FOREST CONCESSIONS

It is aiming at changing primeval forest into a vast timber plantation from which in time it will regularly be able to extract economic crops. The greatest benefit from its works will therefore be felt but slowly. However, it is extracting timber all the time, and the export markets must be maintained. New uses will be found for timbers now unused. Local demand will be met as far as possible from local resources ; much of the con-

struction work of the Authority will probably best be done with secondary timbers which the forest officers are cleaning out in the course of their work. Revenue will, we believe, steadily increase as the working plan comes fully into operation and new roads and railways are opened up.

In addition, the Authority will be absorbing the Forest Trust, and should receive the revenues of that Trust. We note with regret that the system, by which 60 per cent of the receipts from export taxes on forest products was formerly given to this Trust, has been in abeyance since 1930. We should hope that either this might be re-started or, better still, perhaps, for the Colony in the long run, that all export taxes might be abolished.

2. AGRICULTURAL OPERATIONS

The Authority will own big blocks of land on which it intends to start agricultural settlements of various types. It will, in some cases, provide the working capital, and in others — probably — there will be a demand for small holdings from independent cultivators. In some cases the Authority will be able to charge a cash rent, while in others it will probably be best that the cultivator should give a proportion of his crops to the Authority in lieu of rent. The system which has been so successful in the Sudan might be applicable to the settlements here also. In any case, side lines would find a sale in the settlement markets, and a small turnover tax should be made on all transactions in these. Shops should also be rented to traders in or around the markets, and the traders would thus not only contribute to the revenues, but their operations would be under some control. As the Authority would own all the land in the vicinity, competition from shops just outside the boundaries would be hard. The Authority would, of course, keep these taxes at very low rates ; its objective is to build up the purchasing power of its tenants, and to gain by their prosperity.

The farmers also would be able to buy machinery on credit, and indeed one of its most useful and profitable lines will be to supply capital and machinery in all forms to the agricultural community.

3. REVENUE FROM MINING DEVELOPMENTS

Royalties and any taxation on mining profits should be divided 50 per cent to the Government and 50 per cent to the Authority. This, of course, excludes any profits which the latter has been able to make from the development and sale of prospects discovered by the Geological Survey during the period of preliminary prospecting activity.

4. MOTOR AND FUEL TAXATION

The Authority should take over from the Government all road construction and maintenance, except possibly in the towns, and should receive 80 per cent of the proceeds of a tax on petrol and on heavy oils, and of a tax on all vehicles.

5. PORTS

It should take over from the Government all existing piers and ports and should operate them, improve and construct new ones. It should be able to make a small profit on these, or at least to cover the cost of its operations and the capital involved. The finance of the railways would need to be separately treated, and we need not go into any details — save to remark that there would be many advantages if the major part of the finance could be in ordinary shares and not bear fixed interest.

6. INDUSTRIAL CREDITS

The Authority would lend money to start new industry and could also take shares in such, if it seemed advisable, so as to help more effectively in their establishment.

7. GENERAL

It would be worth while to study whether an arrangement could not be made whereby the Authority would be given a percentage, say 10 per cent, of any increase in the general revenues of Government over the average for the last ten years. The revenue of Government in 1938 was \$1,258,099 — or approximately \$21·8 per head. If we assume that the yield per head remains stationary while the population rises in ten years to 250,000, the yield of taxation would be about \$5,450,000. The share of the Authority would then be 10 per cent of the increase,

i.e. rather over \$400,000 or about £100,000, which is 2 per cent on the ordinary shares of the Authority. We have already shown that the money on loan is for special purposes which should be able to pay for this from the start.

We believe, furthermore, that the figure of 250,000 for the population, after ten years' work, is likely to be attained ; indeed, it will be difficult if not impossible for the Authority to complete the programme we have drafted out if this figure is not reached and even exceeded. If we think for a moment of the number of labourers wanted for the forest clearings, for the agricultural settlements, and for the road, port and township construction, it will be realised that the present population will have to be very largely increased. Further, we have made allowance for direct immigration of over 12,000 persons (families included) for the agricultural settlements. There will be need for personnel for the agricultural stations, and for the Geological Department. The trading community will be likely to increase and to supply the manifold needs of the rising population. The original peoples, also, of the Colony are likely to increase in number with better health and prospects.

This growth will all help to contribute, both directly and indirectly, to the revenues of the Government and the income of the Authority. Many of the labourers will, we hope, be drawn from the West Indian Islands, where over-population has hindered opportunity and caused poverty. They will benefit from greater wage-earning power, and many will, we hope, take up lands in the Colony. This will make for a growth in the per head trade over the whole region, and will have its repercussion on all. We believe, therefore, that the greatest benefits will accrue to the Home Country, not from the direct return on the investment — though in the long run this should be satisfactory — but from the general quickening of the life of these backward communities. A little known country will have been brought into the open, its resources carefully studied, and a real effort — based on the cooperation of all the scientific services — will have been made to develop these resources on sound and profitable lines. At the same time, a contribution will have been made to the relief of over-crowding in the West Indies, with new life and opportunity given to some members of a community who badly need them.

We would like, finally, to mention two points specially. First, the need for paying special attention to the internal trade of the Colony, which will be of the first importance in raising the standard of living of the people. Each farmer will have some particular aptitude, each farm will have its peculiar aspects of slope, wind, soil and water supply, which will have the greatest significance in obtaining a variety of products within the settlements. In the first years, the new arrivals will need supplies ; and, by encouraging neighbouring villagers to bring produce to the local markets, an internal exchange of goods will be started. The villagers, also, will be able to buy at the shops of the settlement ; their needs will be met at the local dispensary, and so forth. Gradually their wants will expand and trade will grow. Their methods of agriculture will also be affected by what they see in the new stations — the influence of persuasion and example — and new crops will be introduced. The influence of the local agricultural officer will be an essential link in the chain ; he should know his whole district and its people as intimately as possible, and be constantly on the watch for an opportunity to give them a new idea, or to extend the influence of his station. Open-air cinema halls may be a possibility.

Finally, we must lay special emphasis on the need for continuity of the work of the scientific services. Under our suggested method of development by Authorities, their work would be planned for years ahead, and the funds ear-marked for this. They could go ahead in the assurance that they would not be interrupted, with the results of years of patient work wasted by the first economy committee thought necessary on the advent of hard times. In the past in colonial government practice, when economy was the order of the day, the scientific services have usually been the very first to feel the axe. This would seem to us to be the absolute reverse of what correct policy demands. A difficult time should be exactly the very moment in which to reinforce scientific research. The community should actually enlarge its scientific staff in a reasoned endeavour to find a real solution for its troubles, and new resources to supplement those which had failed.

IV. THE FUTURE

Many men, on thinking over the order of magnitude of the figures we have given, will feel inclined to say : " Yes, it's a lovely castle in Spain, and all very excellent ; but it's wholly unpractical to think in such terms of an odd Colony. What would it mean in £ million, if every such relatively undeveloped Colony were to be put through a ' development forcing house ' like this ? " " Precisely," we answer. " Change the phrase ever so slightly and ask, ' What will it mean in employment in Britain, if all our Empire were to be put through such a forcing house ? ' "

Moreover, the difference between present exploitative, parasitical methods and our idea of the business is just exactly what we want to bring out. Every single move we have envisaged is a rational, necessary, normal and common-sense proposition, and the sums required are the precise measurement of the extent of our failure to do our duty in developing our estate for the inhabitants, for ourselves and for the world at large. It is also the precise measurement of the change in scale of the operations which is necessary, and which we wish to bring home to people with all the force at our command. Everything we want done *could* be done, *should* be done and *would* pay to do. There is no extravagance. It is all necessary, and we must one day do it or give way to those who will. Careless exploitation and destruction must in the end give way to careful control and orderly constructive utilisation.

We have tried to show that much could be done in ten years in British Honduras by a Development Authority which had in view a long-range scheme. It is not to be imagined that, after ten years, all need for new capital would suddenly cease in the Colony ; on the contrary, it will just be starting to make its really big demands, and we hope that these will rapidly increase. Demand for capital largely means demand for goods which Britain is wanting to supply. Nor is it intended to imply that the Authority should supersede all private sources of capital supply and of capital formation ; but that, if rapid progress is to be expected, the latter must somehow be supplemented. We do not want to antagonise the capitalist, but we do want, while increasing his opportunities, to prevent the destruction of the

permanent assets of the land by unwise methods. Private capital has still a vital part to play in the world's work, and it is hard to imagine any sound way in which it can be supplanted at present. But wise control is needed, and the willing consent of all to further the common good.

The Authority's enterprise, therefore, should not be imagined as coming to an end after a few years ; rather we hope that it will enlarge its scope and continue the work of building a permanent asset for the Empire in a prosperous country and a healthy, alert and progressive community. Development must be continuous. Certain of the activities of the Authority will become self-sustaining ; the agricultural community, now settled, should not be in need of further financial help. Scientific help and guidance, market forecasting, plant breeding, soil care, all these must continue. The forest works, however, will have to be carried along for many years ; it will be fifty years or more before the major benefit from the planned development of the forests will be felt. There will be constant need for new capital for communications, and for medical, housing and educational services in the growing community. While many of these can be supplied — and must be supplied — out of revenue in the ordinary way of administration by the Colonial Government, much capital expenditure, on the other hand, for special schemes, buildings, etc., can be quickly and profitably supplied by the Authority.

The past history of British Honduras shows clearly that private enterprise alone is unable to make progress. We suggest one method whereby, perhaps, a solution may be found. In British Honduras, owing to the unusually backward state of the country, the Authority has been shown as taking almost complete charge at first of economic development. This would not be necessary or desirable everywhere. But there should be a subsidiary of the Imperial Development Authority in every Colony or group of Colonies ; and, indeed, a World Development Authority might ultimately be represented by a branch in every country of the world.

OTHER EXAMPLES OF DEVELOPMENT POSSIBILITIES
IN THE COMMONWEALTH

I. INTRODUCTORY

WE have examined in some detail how we imagine that our Authority could attack the intensive development of a backward Colony, and we want now to survey briefly some of the pressing problems which confront administrations in many parts of the world. For this purpose, we propose to refer to cases in the British Empire where these problems are known to exist. Most of the instances are taken from our personal experience, and are not necessarily mentioned because they are the worst examples of the particular trouble.

In Trinidad, for instance, there is an excellent example of the evils of shifting cultivation and deforestation. These evils are world wide. Trinidad gives us in miniature an example of how the damage is done and how we believe that a cure might be effected. In this case, the Authority could undertake a specific job as agent of the Colonial Government, apart from any other development work, which it might also be carrying out. Burma, again, will supply us with an example of the agrarian troubles consequent on a defective system of land tenure ; a problem which is a pressing one in India also, and is not unknown elsewhere in the East.

Kenya will supply us with an instance of the danger of unorganised development, lack of coordination and long-term policy, and, in particular, a definite failure to grasp the significance of pastoral conditions. The Seychelles Islands, on the other hand, illustrate the position of an isolated island community which is growing in numbers and pressing on the available means of subsistence, and is hard hit both by low prices for staple products, and by the competition of synthetic substitutes. As we shall try to show, the help of the Dominions in the attack on these problems will be of inestimable value and growing importance.

These are simply typical examples of the kind of problem which faces Governments everywhere in our Empire today. It seems to us that the method which we are outlining of Development Authorities, financed and coordinated by an Imperial organisation, might have a great contribution to make towards the study of the problems, experiment in various methods of attack, and take swift, effective action once the correct line had been decided upon.

II. TRINIDAD

In Trinidad, the process of deforestation and erosion is at work, and is well described in *Tropical Agriculture*, vol. xvi, No. 10, pp. 230 to 232 ; from which the data for this chapter have been taken.

"The north of the Island is occupied by a range of mountains rising to a height of over 3000 feet. While erosion is causing trouble elsewhere in the Island, the practice of shifting cultivation in the northern range is rapidly creating a dangerous situation. The slopes are steep and the rainfall high, while a very marked dry season creates the additional danger of destructive fires. The original forest has almost disappeared and secondary bush has taken its place ; this is roughly cut down and burnt. The burnt land is planted during May when the rains break. The land is completely bare of vegetation and the heavy downpours play havoc with the exposed soil, very large quantities are washed down the slopes and are either deposited on low-lying lands or washed out to sea. After rain has fallen in the foothills, the rivers which drain them are loaded to capacity with silt, and change within an hour from gentle streams to roaring torrents which overflow their banks and flood the flat lands in the Caroni plain, destroying small houses and making the roads impassable. The crops are usually reaped in six months after planting, and the land is often abandoned after a single crop. When it has rested for from 3 to 7 years, a certain amount of fertility is built up again under cover of a second growth of bush, and it is then again cleared for cultivation.

"Unfortunately nearly all these lands in the foothills are in private ownership — only some 2000 acres being Crown land and the rest, about 28,000 acres, held by various proprietors large and small. The renting of land for this shifting cultivation is quite an important item in the revenue of many of the Estates, rentals varying from \$2 to as much as \$7 per acre.

"The control of this shifting cultivation and the consequent

erosion problems present an interesting study. Considerable quantities of food are grown on the foothills, an important matter to a community which is largely dependent on imported foodstuffs, and it is most undesirable to reduce the total area of land under cultivation of locally consumable crops.

"One method springs to the mind at once. It is to prohibit all cultivation of the shifting type on land lying above the 300-foot contour, and allow the land to revert to forest. This would undoubtedly result in an enormous reduction in soil erosion and flooding. To compensate for the loss to cultivation of some thousands of acres of land, it would be necessary to find suitable land elsewhere. This should present no insuperable difficulty. Apart from large areas of derelict land throughout the Colony, where, in spite of the low fertility of the soils, crops of vegetables could be raised by a system of controlled shifting cultivation, there are thousands of acres of abandoned or almost worthless cacao plantations on somewhat better soils. Such cacao produces a negligible crop, which is not economic to harvest, and even requires a considerable expenditure of public funds in the form of a subsidy to maintain it at all. This cacao should be cut down and replaced by a mixed animal and vegetable crop husbandry, which would afford a decent return to the cultivator and be of great value to the Colony."

Such is the problem.

How can this programme be achieved? If legislation were immediately introduced to prohibit such cultivation, it would meet with fierce opposition from the estate-owners whose revenues were affected, and from the cultivators who saw their accustomed habits changed. Individual rights must be respected as far as possible; we need the support of the whole community if that can be attained, at least the consent of the vast majority. Projects must be both economically and politically feasible. It would seem that here is an opportunity for the Imperial Development Authority to render service. These private lands should be bought up, either by the Colonial Government or by the Authority, as might be agreed, and should be reforested by the latter, as contractors for this specific purpose. The useless cacao lands and the abandoned lands mentioned above should similarly be bought in. Agricultural stations should be started, and settlements around them for the cultivators who are displaced from the foothills. The aim should be to find a way of using these bad lands profitably, to produce more foodstuffs for the community.

Further, it would seem that the cost need not be excessive if means were adopted to give reasonable prices to the present owners. The Authority is not there to be fleeced, and prices paid should be in proportion to the yield of the land to the owners.

If we conclude, from the data given, that probably one-fifth of the lands suffering erosion in the foothills is bringing in rental, and that we want to purchase some 50,000 acres in all to give full protection to the plains, we arrive at a figure of some 10,000 acres paying rent of around \$50,000 per annum. If we allow a twenty-years purchase as a just compensation, we get a sum of \$1 million to be paid for the land. The cacao should be acquired by similar valuation, but in the case of the lands which were in receipt of subsidy the value to the owner should not include the subsidy.

These new lands to be brought under cultivation would be divided into plots, fenced, farm buildings erected, and seeds, livestock and implements supplied. The farms should be in close touch with the Agricultural Station, and should be under the general supervision of the Imperial College of Tropical Agriculture. The cultivators could pay cash rent for the farms as they formerly used to do to the owners of the estates, or they could pay a share of the crop to the Authority, as is done so very successfully now in the Sudan by the Sudan Plantations Syndicate. We may further allow the sum of \$1 million for the purchase of the new lands for the settlements, and from a very rough calculation it would seem that about \$3 million would be required for the beginning of the agricultural stations and the expenses of foundation of the settlements. It would probably be found possible to extend these so as to grow more foodstuffs for the Colony, as soon as the technique of farming on these poor soils had been fully worked out. In arriving at our purchase figure for the foothills, we had assumed that the cultivators were paying \$50,000 rent for their shifting cultivation. As we are now intending to supply them with houses, fenced lands, seeds, implements and livestock, this could be doubled — or a contribution in kind levied — intended to bring in about \$100,000. Markets would be established in the settlements for the sale of the crops and for the purchase of the settler's requirements. A turnover tax would be used to pay for general administration

and supervision, and also to bring in some revenue. The Colonial Government is the gainer by not having to pay subsidy on unprofitable cacao, and for the cost of repairs to the roads after the floods. It would, therefore, not seem to be unreasonable for the Government to pay the Authority a contribution of 1 per cent per annum, on the capital involved.

We must allow for the costs of reforestation of the foothills. This should not be very great, as the prime needs will not be replanting, but the control of secondary growth, so as to allow the more valuable trees to dominate the bush. Protection would also have to be given from fires, and general supervision for some years, until the young trees were well established and able to take care of themselves. We are unable to give any estimate for this work without knowledge of the local conditions. But it would seem that this should not be very large, and can hardly be considered as a part of the cost of the soil conservation and agricultural plan with which we are at the moment concerned. It is part of another plan to create a new capital asset for the Authority and the Colony, and as such would be a valuable part of the whole scheme.

We have, therefore, arrived at the sum of \$5 million in capital expenditure for the lands purchase and the establishment of settlers. We get an income from rent and Government of \$150,000, or a yield of 3 per cent on the investment, without taking into consideration any yield from the markets or the forest which we propose to recreate.

On this scheme we do not think that the cost to the Authority would be large, and after some years, when the settlers were well established and the returns from their lands were growing, we think that there might well be considerable profit.

The benefit to the whole community is very considerable. An unprofitable, wasteful and destructive method of cultivation has been brought to an end. The progressive loss of soil and money to the Colony has ceased, and in its place a better method of farming has been introduced. There would seem to be no manner of doubt that the standard of living of the settlers, under the guidance and control of the agricultural officers, would rise steadily. Their wants will expand and the general trade of the Colony will benefit. More foodstuffs will be under production ;

new forest will be growing, and lands which are now useless will be playing their part in the whole economy. We are getting the farmer into harmony with his environment ; we are building, not destroying.

III. KENYA

Kenya affords a good example of the kind of trouble which uncontrolled development, without any consistent or considered policy, is apt to entail. We have no desire to enter the lists in the controversy of Native versus Indian versus European ; we are concerned with the land and the people considered as a whole — not with rights and wrongs of the past, but with stubborn facts of today. What are the needs of this people and of this land ?

It has often been asserted that the European owns all the best land and that the natives have been corralled in areas of semi-desert, too small to afford them reasonable means of subsistence. It has, equally, often been asserted that the native has completely adequate areas at his disposal — all that he needs and can use — and that only his wasteful methods prevent him from rising on the ladder of progress. But what are the facts ?

Kenya is roughly the size of France, and presents a great variety of climate, topography and natural vegetation. The climate is governed as much by altitude as by latitude. The coastal strip, southern section, is more or less typical of any tropical coast. Adequate rainfall, and a not infertile soil, give considerable scope for agriculture ; but in the northern section the rainfall is more uncertain and conditions are more adverse. Inland of this strip we find what we may perhaps call the “ desert crescent ”, a strip of land on the average some 200 miles wide, where desert conditions are the rule. This skirts the Highlands, which are mostly in the south-west quarter of the Colony, and, crossing the Uganda border, continues almost to the Nile. Naturally this vast territory has many minor variations. In parts, especially close to isolated mountains, it receives a considerable rainfall ; but, over almost the whole belt, the evaporation is greater than the precipitation, and any grasses which spring up after a storm, quickly die away. To the north are plains which drain to the Lorian swamp, the home of the elephant, and in the

neighbourhood of Lake Rudolf is a truly appalling wilderness of wind-swept, bare and scorching rock. This whole area, save where it is crossed by the few rivers which drain the regions of higher rainfall to the south-west, and in the immediate vicinity of an isolated mountain, is unable to support any population other than a few nomad tribes.

As the land rises to the interior and the south-west, the desert gradually gives place to steppe, grass-land and pasture. This is the homeland of the great pastoral tribes, the Masai, Kamba, Meru, Kamasia, etc. The heart of the country is the centre of the south-west at an elevation of over 5000 feet, known as the Highlands, and here we find parkland and high grass changing with ascending altitude to temperate forest and ever-green pastures. This is the area where most of the European settlement is to be found, and is also the home of many native tribes such as the Kikuyu, Nandi, Lumbwa, Algeyo, etc. The western slope down to Lake Victoria is geographically more fitly considered as a part of Uganda. Here we find a region of deep fertile soil and high rainfall, the home of the great and industrious agricultural group of tribes, the Kavirondo.

A brief and, therefore, only partly exact survey of the history of some of the native lands may not be without interest. When British rule was established, and the development of the country started in earnest in the beginning of this century, the pastoral tribes were suffering considerable hardship from the epidemic diseases which ravaged their herds at frequent intervals. The Government set to work to find remedies and to inoculate the beasts against rinderpest, pleuro-pneumonia, etc. These have been very successful, and the great epidemics have become things of the past. The herds of cattle multiplied and grew fat. The flocks of sheep and goats grew faster still. The native no longer lost his beasts to raiders, and was content to watch his herds grow steadily. Agricultural tribes became pastoral as the easier form of existence, and these flocks and herds were not recognised by the native simply as his means of livelihood, his sustenance, but even more as his outward and visible sign of wealth, at once his investments and his jewels. It has been very truly said that the East African is still "on the goat standard".

All, therefore, should have been well, but no attempt was

made to ascertain scientifically the carrying power of the land. The herds have so multiplied, or — in other words — the Government's policy has been so successful, that the delicate balance of nature has been completely destroyed by over-grazing. The grass cover has gone over very large areas, and the soil itself is now being swept away by wind and rain. Famine once more stares the native in the face. It must be stated at once that this is not the first time that this has happened. The face of Kenya bears many scars, where — in the past — the native has destroyed his lands and has been compelled to move. It is probable that much of the desert between Nairobi and the coast has in the past been better able to support life than is the case today ; and, on the borders of Uganda, in the Suk country, there are many areas which were obviously damaged by the native long before we came to Africa. But now the damage is more widespread, and it is no longer possible for the native simply to move on to ruin other lands.

We come, therefore, to the conclusion that two of the difficulties in deciding whether the pastoral native has sufficient lands for his needs are, first, a definition of the term " his needs ", and, secondly, the lack of a thorough scientific survey and study of the potential production of his lands and of the best methods of securing the greatest production. If by his needs we mean sufficient land to raise the productive herds which would keep him and his descendants fit and healthy and — by good husbandry — give them opportunity for a rising standard of living, we must then undertake to answer the second question, — What can the land carry, and what methods should be employed to give the maximum yield ?

The carrying power of the native reserves today is vastly different from what it was when they were delimited. This is due to over-stocking caused by the ignorance of the native, and to the all too successful policy of the Government Veterinary Department in controlling cattle diseases. The state of the chief pastoral areas has been recently well described by the Chief of the Division of Plant Industry of the Union of South Africa, Dr. I. B. Pole Evans, C.M.G., in his *Report on a Visit to Kenya*. What he has to say of the Kamba Reserve (p. 4) is typical of the rest :

"The reserve as shown to me was a most distressing sight. It was a shambles — the result of land mismanagement and misuse. Most of the topsoil had gone and the subsoil was rapidly following suit. Sheet erosion and gully erosion were eating away the land in almost every direction. The grass cover had almost entirely disappeared, and relics were only to be seen in spots where it had received some protection."

We read the same of the Kamasia Reserve :

"The Reserve as shown to me displayed in their worst form all the symptoms and after effects to be seen throughout Africa in thorn country that has been subjected to unremitting pressure by man and beast. The grass cover had gone, thorn bush was increasing everywhere, much of the topsoil had disappeared, gullies were eating deeper and deeper into the land and termites were completing the picture of desert conditions.

"Both on hill and on plain the primary cause of this increasing desolation is the removal and destruction of the grass cover by the grazing animal. From what I saw I concluded that goats and termites must be held largely responsible for completing the final stages in the awful desert now there."

In case it may be thought that these are the only bad cases, let us read of the Suk. Here we are told that

"the total population in 1931 was estimated at approximately 24,000. In 1933 it was said that the Reserve was carrying 218,000 cattle, 307,000 sheep and goats, and 10,900 donkeys. The state of the Reserve prior to 1933 can well be gauged from the following statements quoted from the *Kenya Land Commission Report* :

'The evidence of the District Commissioner and our own observations during our tour through the district show that the country is rapidly being destroyed and dense thorn scrub is replacing grassy plains. This over-stocking has already had one very serious consequence. Shortage of grazing in the reserve has driven the Suk over the Uganda border, and caused serious friction with the Karamajong. We find it difficult to speak with moderation of the enormous numbers of stock which the Suk have been allowed to accumulate, and the problem thereby created is extremely serious. . . .'

"The western portion of the West Suk Reserve was at one time undoubtedly one of the most valuable grazing areas in the Colony, but it is now being rapidly reduced to desert through continuous heavy stocking."

The condition of the pastoral lands in the Reserves has been remarked upon by many commissions and visiting experts for the last ten years or more. Experts sent by the British Government and by the Kenya Agricultural Department to make recommendations have reported in no uncertain terms. Yet no remedy has been effected. To some extent this is due to the fact that experts were not agreed among themselves about the remedy ; and, even if they had been agreed, it may be doubted whether the Kenya Government would have been able either, financially, to afford the necessary measures or, for political reasons, to propose them in the face of probable opposition. Dr. Pole Evans (p. 11) says :

“ A careful analysis of the above quoted proposals for the reconditioning of the Kamba Reserve reveals the fact that there is common agreement regarding —

- (a) The necessity for the reduction of stock.
- (b) That goats are the worst offenders so far as erosion is concerned.
- (c) That blocks of badly eroded country will have to be closed completely to enable the natural vegetation to return.

“ There is also a decided weight of opinion on the part of the majority that reafforestation should play a large part in the programme.

“ I may say at once that my own views are in accord with those expressed above in paragraph 55,¹ but I cannot refrain from commenting on the fact that all these recommendations completely overlook the supreme importance and necessity of restoring the natural grass cover. . . .

“ No State department has in the past shown any inclination to attach any real importance to the study, management, and preservation of the natural grass-land in Kenya. The result of this neglect is to be seen throughout Kenya, but more especially in the native reserves in the arid and semi-arid areas.

“ I attach very little value to any schemes of reafforestation in these areas. The only practical value that can possibly accrue from afforestation is in the provision of timber for fuel purposes. It is both common knowledge and experience the world over that in semi-arid regions the planting of trees has done little or nothing to stop erosion or to improve the soil, where planted, for further agricultural operations. They have little or no effect on climate and their usefulness as windbreaks has been disappointing. They dry out the soil

¹ See (a), (b) and (c) above.

more effectively than any other type of vegetation and make heavier demands on soil moisture than other plants. Steps which are being taken by the Forest Department to remove grass from the steep hill slopes at considerable expense in order to plant trees are, in my opinion, a very mistaken policy."

The expert of the Agricultural Department has made a number of recommendations as to the reconditioning of the Kamasia Reserve. On these we read, in the words of Dr. Pole Evans :

"Extend agricultural operations, encourage the use of ploughs, introduce drought-resistant food crops and possibly cotton, experiment with dam irrigation, reduce number of stock to true carrying capacity of land, establish fodder reserves, employ system of rotational grazing, appoint a grazing control officer, replace the goat by cattle and sheep, construct dams rather than sink bore-holes, continue reconditioning work on approved lines, deal with an area of 21,700 acres a year, and make an aerial survey of the reserve.

"I agree that the last recommendation, regarding the aerial survey, is one of the first steps that should be taken in any scheme for the reconditioning of the reserve. I also urge that the reconditioning work already so successfully begun should be pushed forward with greater intensity and in the light of the further knowledge which is available.

"The other proposals — such as the extension of agricultural operations, the introduction of resistant fodder crops, the encouragement of the greater use of ploughs — are to my mind fraught with grave danger if applied to arid country. I regard them as merely based on conjecture or tradition, and without any real foundation. They amount to nothing more than a repetition of what has already been carried out in the Kamba Reserve with such dire and futile results.

"Matters such as reducing the number of stock to the true carrying capacity of the land, employing systems of rotational grazing, and replacing goats by sheep, all require the most careful investigation before any rules or principles can be laid down.

"I therefore feel that the Colony, and especially the native reserves, needs something much more fundamental than this. Instead of hit or miss methods or blind experiment such as are proposed, research should be applied to this vast problem with all the force and vigour that the resources of the Empire can bring.

"My recommendations for dealing with this reserve are :

- (a) Make an aerial survey of the reserve.
- (b) Combine this with a botanical survey from the ground.
- (c) Select a suitable section representative of the reserve as a whole,

of approximately 30,000 acres, remove all natives and stock from it, and establish a pasture research station on it.

"The primary and sole functions of the research station should be : to work out a permanent farming system based on the natural vegetation and the capacity of the land. This would include a detailed study of the grass cover, ways and means of protecting it, propagating it, and putting it to the best possible use.

"In this selected section the reconditioning work should be concentrated and pushed ahead with all speed."

To sum up his estimate of the position, Dr. Pole Evans says :

"The position is steadily growing worse. No Department of State is able to cope with it, and the combined efforts of all the State Departments have also failed to stem the tide of destruction, desolation and famine. The Provincial Administration has failed, the departments of agriculture and veterinary services have only aggravated the position, and the forest department has effected no relief.

"It must be clear, therefore, that something much more is required to deal with this vital, national issue. A new view-point is necessary.

"What is urgently needed is an active and powerful Department of Pastoral Research — a department which will not only save the semi-arid regions but will also in course of time build up pastoral industries on the magnificent pastures of Kenya's moister regions."

In these views we heartily concur ; but we would go farther and say that a new point of view is necessary concerning the whole development of the Colony. No policy can be successful, save by chance, which is not founded on knowledge. The chief reason for the divergence of views as to the causes and remedies for the state of Kenya lies in ignorance. We need science and knowledge : first, survey ; secondly, experiment ; and thirdly, swift action. The country has not yet been surveyed topographically, the survey being stopped for reasons of "economy" in 1922. An aerial survey would be of the greatest use, and, coupled with a ground survey of the geology and vegetation, would enable some attempt to be made to organise experiment in order to decide the best methods of land utilisation.

We have just seen the possibilities which spring to the eye of a trained pastoralist ; but there are other great possibilities in Kenya. As an example, we may mention the river Tana, which drains a large area of comparatively high rainfall country, and flows through the desert of the north to the Indian Ocean. This

river in its lower reaches exhibits all the usual features of a river system draining eroded headwaters. Its bed is higher than the surrounding country ; it is subject to floods, and even changes its course at intervals. It is surrounded by a desolate morass. Some primitive irrigation of a very messy kind is practised by the ignorant and scanty population. Were a concerted effort to be made to control the headwater regions by re-grassing the country, it might be possible to consider a big irrigation scheme for this vast waste area. Dr. Pole Evans has pointed out that there is the possibility of forming a great pastoral industry in Kenya. There are many other possibilities awaiting development.

Kenya offers great variety of climate, soil and topography. The western slope, near Lake Victoria, is not so greatly threatened by erosion troubles as are the east and north. The tribes on the Uganda borders south of Mount Elgon — the Kavirondo — live in a land of rich and deep soil and very high rainfall. The problem here is that of a growing population which is pressing on the available area, where the question of the maintenance of fertility under a continuous crop system has to be solved. Attention to the humus content ; avoidance of erosion on steep slopes, better agricultural methods and constant supervision and experiment, coupled with gradual development of industry and mining, will give an opportunity for a rising standard of living amongst the tribes. There is the further possibility of the lowering and subsequent control of Lake Victoria, which might enable more land to be brought under cultivation. (This is, however, a part of the whole scheme for the control of the Nile, and will be discussed later.¹ Wisely handled, a large scheme could bring benefit to the whole continental region.)

In the centre of the Colony is the Rift Valley, which in its north-west portion is known as the Kerio Valley. Here is a tribe which lives partly in the valley and partly on the Cherangani mountains, a plateau land of high rainfall and temperate forest with permanent grass. This tribe, the Marrakwet, work an irrigation scheme of very ancient lineage, and the only thing of its kind in this Colony. Even so, when the rains fail, they suffer from scarcity and famine. They were medically examined some years ago, and all found to be suffering from enlarged livers and

¹ See p. 119 *et seq.*

almost incurable sores, chiefly on the legs and ankles. These conditions seem to be connected with their diet. Much could be done for this tribe by way of simple improvements to their irrigation schemes, and by the introduction of new crops coupled with education in their use. Communications are badly wanted, and all the simple remedial measures, advised by Mr. Hall in his programme,¹ would be easily applicable here.

The European occupied area in the centre of the Highlands contains some good soil, but much of the land is of marginal quality. Eventually it will probably be recognised that over a large part the soil is too poor, the rainfall too erratic — and incidentally, the capital employed has been too small (and, where borrowed, too expensive) — for European farmers to have a chance of success in agriculture. Some of the districts have many derelict farms, and should probably never have been opened to settlement. Indeed, a visit to certain blocks by a trained geologist, before they were opened as fit for agriculture, would have shown that hundreds of square miles were underlain at the depth of a few inches by hard ironstone in the form of "laterite". Agriculture under such circumstances is hardly possible. Had this been realised in 1919, some millions of wasted capital might have been saved. Such a visit might have cost a few hundred pounds, but the embryo Geological Survey, which only possessed a single trained geologist, was abolished altogether in 1922. Such lands might be of great use for pastoral industry, and were in former times the home of countless herds of zebra and antelope of all kinds. If large blocks were carefully fenced, all movements of game and cattle controlled, and organised dipping and grazing instituted, the endemic disease, East Coast fever, could be brought under control, and a useful pastoral industry begun. Soil conditions could be improved in certain blocks, and grazing improved by the introduction of new grasses and feed for the beasts in dry seasons. Very much could be done in a general way to help the European farmer. Really cheap credit is needed, and a critical survey of the present system of land tenure might yield good results. Mortgage interest is very often oppressive, and has operated to check genuine development.

But apart from the central areas, the coast is quite worthy of

¹ See p. 8.

attention. Hitherto it has been what we may call a monument of neglect. Much of the soil, it is true, is not too fertile, and the Arab proprietor does not seem to have been able to adapt himself to the abolition of slavery, even to this day. This is shown in his apathy, and in the great difficulty which exists in introducing any new methods into his systems. Nevertheless, something could be done. There are many Arabs who would welcome a more enthusiastic lead from the Government, or from a large organisation with the Government to give its encouragement. There is ample scope for great advance in the methods of cultivation and for the introduction of new crops. A large Research Station,¹ with ample funds for experiment on a considerable scale, would have a great opportunity for good work. Communications need improvement, new markets should be opened and new methods introduced ; and, in general, the infusion of new life and new enthusiasm is required.

It has often been stated that, if the native is encouraged to grow his own crops, the labour supply of the Colony will fail entirely. With this opinion we are definitely in disagreement. We hold that a rising standard of living will have the opposite effect. The native will find new wants, and new opportunities will enlarge his horizon. Better health and better housing will promote a rise in his numbers, with a fall in the death rate of children, and also that greater energy in the individual which is so badly needed. With an adequate supply of native labour, and with an active and intelligent European and Indian population, the future for Kenya could well be a bright one. We see no reason why the Colony should not gradually extend its industry and its mining activities. Up to 1931 it was believed that the discovery of payable mineral was hardly possible. When in that year gold was actually discovered in the Kakamega district, a geological survey was started once more on a miniature scale. Progress has been pitifully slow owing to the shortage of staff. However, it is now recognised that minerals, and especially gold and copper, are likely to play a rising part in the Colony's economic

¹ A Research Station existed before the 1914 War near Mombasa, and was working on fruit. They had, by some years of careful selection, produced a strain of pineapples admirably suited to the region. The whole stock of these pines was eaten by the troops on the way up to the front. They were said to be quite palatable !

life. It was recently stated that Kenya is one of the most promising of the lesser known areas, geologically speaking, in the whole Empire ; and it was proposed to apply for a grant of £30,000 from the Colonial Development Fund for the geological survey of the Colony.

Development policy should vary with the circumstances of each Colony, and Kenya affords a good illustration of this. Here we believe that a very different policy should be followed from that, for instance, which we have advocated for British Honduras, where we advise that the Authority should undertake the prospecting. The minerals in Kenya were found by the private prospector, and all the initial development was undertaken by private enterprise. The Kenya Government was in no way responsible for their success and offered them no help or encouragement in the search ; though the greatest sympathy and understanding was always shown by the individual officers of Government and by the Government itself when the discoveries had been made. Now that considerable deposits have been found, there can be no justification for the Government to enter the field in competition with the private prospector. The geological survey should be confined simply to the survey of the geology, and to the usual tasks of a Department in giving help and advice to the miner in his difficult and often disheartening search for the riches which nature knows so well how to hide.

In Kenya, we think that there is a great field for a Development Authority working on lines similar to those already outlined, but suitably varied. What is most needed is scientific research first, in order to get at the facts. This should be followed by careful experiment on a reasonable scale. When we know what should be done, when the policies have been worked out and the costs determined, policy must then be translated into action.

Britain has a grave responsibility to shoulder in regard to the problems of Kenya, now all too pressing. Neglect by the Imperial Government and contradictory policies (or no policy at all) have been responsible — in no small degree — for the disastrous state of much of the land today. Ignorance and procrastination, coupled with the worst effects of "Government by Committee and Commission", each unable to give effect to their advice (happily so in many instances), have resulted in a

most dangerous situation. The remedy will need years of work and very considerable expenditure to discover. Further delay may well mean irreparable disaster, and famine for many sections of the population. If the native lands are definitely turned into deserts, as is rapidly becoming the case, what is to be the future of the tribes? There are no other suitable lands to which they can be transferred, and, without any settled policy, these new lands — if they existed — would soon be changed into desert in their turn. Are the tribes, then, to be left to starve? Or are they to exist for ever on Government rations in Special Areas?

A comprehensive policy should be worked out without delay, and must be based on the cooperation of all the scientific services and the practical men to a common aim, the restoration and sound development of all the resources of the country. Britain must supply the capital and the direction needed, and must take the responsibility for the enforcement of policy when this has been worked out. It is not in direct return that we must look for the greatest benefit to Britain. It is in the indirect return from the sound development of industry, of agriculture and of mining that Britain will reap the greatest return for her effort and her expenditure.

It should be remembered, however, that there are considerable opportunities for large-scale works which might well yield a very important revenue. The Tana river drainage and irrigation scheme is a case in point. In the middle and lower Tana river country there is an area of over 2000 square miles (equivalent, that is, to one-sixth of the cultivable area of Egypt) which is well worth the closest examination. It is not to be imagined that this whole block of country would be brought under irrigation, but there is a quite considerable seasonal rainfall in parts of the area to which irrigation would be supplementary. If it were feasible, such a scheme would probably be remunerative to the Development Authority, and extremely useful to Kenya. Success would do much to solve the problem of the native lands and provide great opportunities for the native cultivator. It will be objected that the East African native knows nothing about such work, and that it will be extremely hard to train him to the meticulous care of his land which will be necessary. But the success of the Sudan, in rather similar circumstances, would lead

us to think that there is nothing impossible in the project.

Naturally, the whole area would require survey, and experimental stations would be wanted to study the soil conditions. In referring to the possibilities, Worthington states :¹

“ A recent study of the Tana river showed how a large area, at present ravaged by soil erosion, could be changed into a centre of permanent settlement by an irrigation work. It is significant here that nothing further can be done until the whole region is mapped to a degree of accuracy far surpassing that of the present.”

The work of engineers and scientists is required to draw up a comprehensive scheme for the proper utilisation of the river from its source to its mouth. The whole drainage basin should be treated as a unit on a considered plan. Imagination leads us to think of how the headwaters could be re-grassed and erosion controlled, thereby increasing the value of these lands. Further down the valley, dams would need to be established when the waters were no longer laden with silt. Control thus established, the drainage and layout of the irrigation works for the lower valley and the delta would be possible. A railway would be needed ; roads and bridges constructed to serve the whole area ; canals, fields, farms and villages planned and built. A system of agriculture would have to be worked out, based upon the nature of the soil and its suitability to various possible crops. Markets and stores would be needed near the agricultural research and instruction centres, and their demonstration plots. Blocks of timber would be wanted to provide shade and fuel. Livestock also are required for food and for the good of the soil ; and grazing lands would have to be laid out, and food for the dry season included in the rotation of the irrigated plots.

There is an almost virgin field for this work, as, at the moment, the country is very sparsely inhabited. We need not labour the point of the benefit that such a great project might bring to the Colony, to Great Britain and, in fact — in its small way — to world trade. All such schemes need years of work and preparation, and vast expenditure in the form of capital goods, railway material, road construction equipment, bridges, cement, trucks and lorries, and all the varied equipment for the

¹ E. B. Worthington, *Science in Africa*, p. 5. (Oxford University Press, 1938.)

houses, farms and the land. The money spent in wages to the labourers in the country goes quickly into circulation to the benefit of all. A native's wages are spent almost immediately, except for what he keeps for taxes. He usually only works for a few months, and then stocks up with goods and goes off home ! As soon as a railway or other project starts spending money, the demand for native goods expands ; — the time-lag is negligible and the benefit immediate. The same holds true of welfare. The large labour camps are carefully controlled, with resident doctors, etc. ; food is always provided as well as wages. Native labour, in fact, is always fed, housed and doctored, in addition to being paid a cash wage.

And so, Japan can sell more cotton shirts ; Bata more cheap shoes ; Ford more trucks and tractors. Agricultural officers, engineers and artisans are wanted. Then gradually the production of new wealth starts. A dreary waste is being turned into useful productive land.

IV. THE SEYCHELLES ISLANDS

The conditions and the difficulties of the Seychelles can be taken as fairly typical of the great number of Island Colonies which we possess. Individually of small importance, they might well be made of vastly greater economic use. The Seychelles group contains about a hundred islands and islets, which vary in size from a mere rock to Mahé — which is some fifteen miles long. They are mostly of granite formation, the tops of the hills on a submerged plateau in the midst of the Indian Ocean. They are of considerable value as a cable and naval station, and have about 30,000 inhabitants.

In the past their chief exports have been vanilla, essential oils, copra — amongst the agricultural products — and the guano of the outlying islets, which is now approaching exhaustion. Vanilla and the essential oils have suffered from the competition of synthetic substitutes, while the copra has also fallen on bad times, owing to disease in the coconut trees and low prices in the markets. Some progress has been made towards the control of the diseases, but the export of copra can never be large from these small islands, and, as the supply is irregular, even if cooperative

marketing were to be instituted, it seems improbable that the produce could ever get good prices in the United Kingdom markets. The essential oil industry will be helped by the establishment of a central distillery, and in recent years the road system has been much improved. The Government has acquired considerable estates in the centre of the island of Mahé, which will enable some afforestation to be carried out, and many experiments have been tried in an attempt to introduce new crops. Brazil nuts have been grown with some success. However, the small acreage of land available puts an inescapable limit on the possibilities of agriculture.

In recent years the tourist trade has been a source of revenue, and more could be made of this. The big-game fisherman, to whom this group of islands might become a Paradise, has great difficulty in hiring suitable boats and in finding guides who know the waters. In fact the waters are not known. Visits to the many outlying and picturesque islands is difficult owing to lack of suitable accommodation. The shipping and mail services are infrequent, and though the group is not far off the African-Indian and Far East route, it would not seem likely that more ships will call unless more inducement can be offered.

There is, however, one possible source of employment and revenue for the people which exists in quite unlimited quantities and the ultimate resources of which are completely unknown ; the Ocean which surrounds them. The possible fish resources of the Seychelles are very varied. The inshore fisheries, which now provide the great majority of the local supply, are small and already heavily fished. They are not likely to be industrially important. At various seasons, however, the coastal waters are visited by immense shoals of "sardines", which are followed by several varieties of mackerel. These are in their turn chased by the predatory pelagic fishes, such as tunny, caranx of several species, bonito, swordfish and sailfish ; all excellent food fish, besides excellent sport for the angler. They enter the bays of Mahé in vast shoals and great numbers are taken, but only for the local market. Little is known of the movements of these migratory fish, which appear regularly at different points of the coast and at different times of year.

Besides the pelagic fish, however, the various offshore banks

abound with numerous species of bottom feeding fish of good quality. Even on those which are within an hour or two's sail from the chief port, it is possible to fill a large motor boat in a few hours, while the many outer grounds, near the edge of the ocean deep, are literally swarming with innumerable fish. These distant banks are hardly ever visited by fishermen ; their boats are too small, few have motor power ; they have no knowledge of navigation and no compasses, so dare not venture out of sight of land, and in addition they have no means of preserving their catch until they can reach market.

A few hundred miles to the south-east lies the great Saya de Malha bank, and south of that the Nazareth and Carados banks. These have hardly been fished at all, save by an occasional sailing-ship becalmed in their vicinity, and are believed to be swarming with all kinds of fish.

Intensive study might well be given to this subject of the food fishes of tropic seas ; and the Seychelles would make an admirable centre for a Research Station to examine them. A ship would be required, fitted to investigate the kinds of fish and their movements, the best method of catching, and methods of preserving the catch for market. The various possible markets should be studied and trial shipments made. The United Kingdom might take tinned fish of many kinds, while salt fish could be sent to Zanzibar and East Africa, India and the Far East. New methods of preservation might be worked out by such a Research Station. The resources of science in this matter of the preservation of food have not, as yet, by any means been exhausted.

If it were found possible to preserve and market these fish, an industry could be started. A mother ship would be wanted, to which a fleet of the local fishermen could be attached with their small boats. An aeroplane would be invaluable as an auxiliary, and also for the research work, to spot and to follow the shoals of pelagic fish, and also to discover the submarine banks.

Here is an untouched field ; information gained would be of immediate importance, and could also be applied to many other such island groups. We may mention the Maldives and Laccadives, where the bonito arrive in great shoals, and where the natives have developed their own peculiar method of catching these agile and delicious fish. The Nicobars and the Andamans

are known by repute to every fisherman in the Indian Services. The South Sea Island groups suggest themselves — also the Falklands and St. Helena. For the latter, a market might be developed in South America, and a new industry would mean much to that Colony. Ascension's wealth in fish has given magnificent sport to many anglers in the service of the old Eastern Telegraph Company. All over the Tropics and in the Southern Seas there is an inexhaustible reserve of fish waiting for us to find a way of using them.

When the sea fisheries near the great European markets are showing signs of depletion, owing to the increasing drain to which they are being subjected, not to mention the fouling of the grounds by the wreckage of war, a new source of supply might well be of use, if it could be tapped. New methods will have to be adopted and considerable research and experiment will be required, the results of which would be of great importance to the fisheries of the North as well as to the virgin waters of the Tropics. It might well be that we could found a new industry which would be of great value. But this is not work for an individual or for any single Colony to undertake ; it is eminently suitable for the Imperial Development Authority.

V. BURMA

In the past few years, the peace of the Commonwealth has several times been disturbed by outbreaks of violence in which the root causes of the insurrection have been economic. The most serious have probably been those of Palestine and Burma, with the feature in common that the causes have lain alike in faulty systems of land tenure, coupled with the influx of a foreign race with greater financial ability than the present occupiers. The general agricultural distress which the fall in prices since 1930 has caused, completes the dangerous situation in Burma, while in Palestine over-grazing and consequent erosion have resulted in increasing and man-made sterility of the land.

Burma is a delightful land. It is a picture compounded of many elements ; — the smell of wood-smoke from the forest in the hot weather ; the sound of gongs and bells from the temples ; the rivers deep down in their gorges, talking to themselves in the

evening quiet ; the bazaar at Mandalay, and the silver-worker at work near the walls of the old palace of the Burmese kings ; the elephant hauling teak in the forest, and the great rafts floating slowly down-river in the floods ; the welcome of the villagers to the traveller benighted in the forest, and the tomatoes stuffed with delicious curry which they gave him when he ran out of food ; the Shan States and the great open spaces ; the smell of the pines on a hot day, and the mist from the snipe bog rising in the cold winter morning.

The wonder of that land is ineffaceable. There is so much to do, and there has been so much neglect. The Burmese are a happy-go-lucky crowd, the Irishmen of the East ; but we have certainly not done everything possible to earn their respect. The economic development of the land under our administration has been far from perfect. It is not suggested that the men on the spot are to blame ; it is rather the system which is at fault, the decisive voice in administration so far away and aloof from the economic facts.

In Burma the system of land tenure has long given cause for grave uneasiness. It has always been the declared policy of the Government to encourage the peasant proprietor and to discourage the growth of a landlord system, especially the non-resident and non-agricultural landowner ; but the net results of its efforts have proved disappointing. In Upper Burma — until recently — the peasant has seemed to be secure, but the fall in prices here as elsewhere, has upset the relations between debtor and creditor in the case of debts contracted some time ago. In Lower Burma the “ industrial system ” of agriculture, where rice is grown on a large scale for export, and the needs of the population are supplied from the cash proceeds of their crops, has long been recognised as likely to give rise to serious problems.

In 1891 the first attempt was made to check the sales of land, and since then there has been, in the words of the Interim Report of the Riot Enquiry Committee,¹ “ an unhappy record of prolonged but uncompleted endeavour over forty-five years by the Government to make up its mind to do something and what to do, while the evil which was recognised as ripe for remedy grew progressively more intractable ”.

¹ Rangoon, 1939.

The scale of the evil and, generally speaking, the failure of the endeavours made to bring effective help to the peasantry, can be judged by the following extract from the tables on pp. 62 and 63 :

Year	Region	Agri-culturalists	Non-agriculturalists		Total Occupied Area
			Resident	Non-resident	
1927	Lower Burma .	7,563,203	735,723	2,157,496	10,456,422
	Upper Burma .	7,242,087	310,758	375,653	7,928,498
	Total .	14,805,290	1,046,481	2,533,149	18,384,920
1937	Lower Burma .	5,895,749	989,419	4,316,598	11,201,766
	Upper Burma .	6,967,125	475,745	660,271	8,103,141
	Total .	12,862,874	1,465,164	4,976,869	19,304,907

On page 12 of this Report we read that, in the "thirteen principal rice-growing districts of Lower Burma, the Indian chettyars in 1930 occupied 6 per cent of the total occupied area, while in 1937 they were in occupation of 25 per cent. That, of course, leaves out of account the further area of which they are mortgagees but not in occupation." In the Insein District, parts of which were settled in 1933-1935, chettyars held 31 per cent of the occupied area, while in the Pegu Settlement (1932-1934) the "chettyars held over 36 per cent of the total land".

We can readily understand that the peasant has felt less and less security in the tenure of his land. Those dispossessed were obliged to rent land where they could find it. The fall in prices has left all too little for the cultivator at the end of the year. The working capital of the land has steadily declined. "In the recent Pegu Settlement it was found that 50 per cent of the rented area was held by tenants who had worked the land for one year only, 17 per cent by tenants of two years' standing, 8 per cent by tenants of three years' standing, and 25 per cent by tenants of four or five years' standing. Much the same proportions prevailed in the Insein District. This ambulating tenant population can in the main mean but one thing, that the conditions do not yet exist in Burma to create a stable, contented and prosperous, nor even a self-supporting peasantry."

The results of such a situation are, of course, deplorable for the land and for the man. The trouble lies partly in the Burman

character and partly in the system of agriculture which has grown up in Lower Burma since its occupation by us. When Great Britain occupied the country, large areas were uncultivated, and great efforts were made at once to drain and clear the land and to open up communications. This very fertile and well-watered country was admirably suited to growing rice, a crop which has large seasonal demands for labour. Even in earlier days, numbers of Indians came over to Burma for this work, but when we had completed the conquest and pacification of the country, the stream became greater. Of course, the Indian shopkeeper and money-lender was there too. The Burman, a good-natured, tolerant and pleasure-loving person, extravagant moreover, and all too fond of gambling, silks and the luxuries of life, easily began to borrow money from the Indian. The next crop was pledged, the crop after the next, and the land. Interest rates are very high ; many could not pay, and the mortgagees foreclosed — very often against their will, be it said. Finally, the world-wide decline in the value of agricultural produce has brought complete disaster to many here, as elsewhere, where exports are the prime source of income to the farmer.

The trouble is worst in Lower Burma where, as we have said, the rice export trade is of the greatest importance, but it is spreading also to Upper Burma, and naturally there is widespread uneasiness, restlessness and discontent. The Burman feels that he is being ousted from his own land by a stranger. Race feeling grows and becomes dangerous in a land traditionally tolerant, hospitable and kindly. The Indian chettyar is, of course, most unpopular ; “ the benefit of whose presence in the country in the past has been forgotten in the financial disasters and misunderstandings of the depression, and in the ensuing process which has placed him temporarily in possession of a large part of the land of Burma ”.¹ Political unrest has naturally been the result and has culminated in widespread rioting and finally in armed insurrection.

Burma is one of the few countries of the East where there are, still available and undeveloped, comparatively large areas of land suitable for cultivation ; and this seems to us to be a typical case where the Imperial Development Authority would have an

¹ Final Report, p. 289.

opportunity of doing good work. No legislation which aims at controlling the sales of land can be effective for long unless, at the same time, it lays the foundations of an agricultural system which is economically sound. The appropriate procedure would be for the Development Authority to form a subsidiary for Burma which should have the power to set up a Land Trust. This Land Trust should be empowered to buy land held by non-resident or non-agricultural owners at prices to be governed by the rates of interest current in the country at the time. That is to say that, where 12 per cent is the rule (and the effective rate is usually more than this in Burma and India), not more than eight years' purchase should be paid. Agricultural mortgages could also be taken over by the Land Trust. Agricultural settlements should be formed on lines similar to those which we have outlined for British Honduras,¹ centred upon an Agricultural Demonstration Station and with a resident agricultural officer in charge. A local market centre should be built and co-operatives encouraged. Diversity of crops should be aimed at, and the whole agricultural and research system comprehensively planned. Reasonable prices paid for the land, as suggested above, coupled with the ability of the Authority to borrow at very much cheaper rates than are at present available to the peasant, would enable a great reduction in the rents to be made, and at the same time enable a reasonable return to accrue to the Authority. Either the rents could be paid in cash or, where the main crop was rice for export, a share of the crop could be given to the Authority in lieu of rent. The Authority, moreover, would undertake the marketing of the crops and thus ensure better prices to the peasant.

At the same time as re-settlement of the areas, now under cultivation, was thus going on, new lands could be brought under cultivation, and water conservation works and irrigation could be largely extended in the dry belt. Comprehensive land utilisation survey is wanted here, as elsewhere, and the whole land should thus be reviewed, forest reserves demarcated, and such land as could safely be released should be made available to cultivation. But the importance of the forest to Burma must not be underestimated. At present the headwaters of the Irrawaddy, and very large areas of the mountainous country from which the tributaries

¹ See p. 49 *et seq.*

spring, is densely forested or, as in the Shan States, covered with rich grass. The forest is well utilised and protected at present. But the population is now very scanty, and with any large extension of cultivation and a rise in the numbers, danger of soil erosion and soil exhaustion consequent on forest destruction would appear. Shifting cultivation is widely practised in the Chin Hills, as in other parts. The dangers, which undoubtedly threaten, should be foreseen and provision made.

Communications could with advantage be greatly extended. A railway to link up Lashio and China would be of great economic importance, and this has, we believe, now been sanctioned under the pressure of war needs. The Southern Shan States railway could also be extended with advantage, and many feeder roads built. Motor roads, too, are a prime need in Burma, and rail communications should be established with Assam via Myit-Kyina.

Particular attention could well be paid to the arts and handicrafts in Burma and the Shan States. Many most characteristic and beautiful local products are to be found. Wood-carving, jewellery, bronze, silver repoussé work and lacquer deserve much greater attention and a wider market than they have as yet reached. The lovely silver work of Mandalay ; the colour of the silk cloths and umbrellas of a Burmese crowd ; the black and gold lacquer of Keng Tung ; gold toilsomely washed from the sandbars of the streams ; the ubiquitous black pottery *poongyi* bowls, — of such too is the picture of Burma made, attractive and unforgettable in the drab uniformity of our wonderful machine age.

Nowhere in the Empire is cooperation with established government more at a discount, and nowhere is the public less given to respect for law and order. We cannot do better than quote the words of the Riot Enquiry Committee in this respect :¹

“ Not the least of the depressing aspects of our enquiry has been the evidence of the readiness, indeed the anxiety, of Burmans on every hand to do whatever lay in their power to exculpate those who have transgressed in these riots, no matter what their crimes have been. There has been displayed before us so complete an absence of public spirit and good citizenship in this respect, that we might have been

¹ Final Report, p. 269.

excused had we abandoned hope — which we have not — of the ultimate creation of a sound and healthy public opinion in Burma. This has nothing to do with nationalist ambitions with which we sympathise. For, in our view, the quickest way in which those ambitions can be realised is by the establishment among the Burmans of the nation of a public spirit of orderly conduct, tolerance and honest dealing, while the greatest enemy to their realisation is the spirit of hostility to discipline and social order which has been displayed before us."

During the last war, when the Burma Rifles were being raised, a constant stream of recruits was enrolled simply to desert as soon as they had been issued with a great-coat. For one recruit who remained with the regiment, there were more than ten who thus decamped, and who were completely undiscoverable by the police. This attitude must, of course, undergo change before Burma can be considered fit for further great advance along the road of self-government. It is the part of the leaders of Burma to educate their compatriots in the ways of self-discipline and order. The present attitude can only be changed by an active policy on the part of Government, on whom in the last resort must rest the responsibility for creating an active spirit of cooperation with the people who are its charge.

Such an organisation as that of our proposed Imperial Development Authority would be able to play a great part in this educative work, which is so badly needed. It could actively help the Burman to overcome some of the greatest difficulties, making it possible for him to help himself. It is no charity organisation, and must always have the business point of view. Gradually, the Burman may be brought to see that active cooperation with the Authority, as the instrument of Government, is to his own advantage. The habit of cooperation will grow. The personal influence of the officers of the Authority will be all important. They must be the trusted friends of the peasant ; constructively assisting him in the ordinary affairs of his everyday life ; helping him to become a better farmer, showing him how to grow more food and to rear better beasts. Their ready appreciation of village industries, of the art of the country, would make constant appeal to his national pride. They would be constantly watching for an opportunity to help initiative and to work with the leaders of the people to the benefit of all.

THE HOME COUNTRY AND THE DOMINIONS

I. DEVELOPMENT AT HOME : TWO SPECIAL CASES

§ 1. *Introductory*

INTO the immense field for reconstruction and development at home it is impossible for us to go at present. All we can attempt to do is to give two special cases where a Development Authority could do good work. We suggest that a Research Centre might be formed to enquire into the economic difficulties of the Highlands and Islands of Scotland, and that this might be situated at Inverness. The main tasks of the Centre will lie under the following heads : Agriculture, Fisheries, Forestry, Industry, with here two important sub-heads — the Tourist Trade and the special Household Industry and Art of the Highlands. Naturally all are interdependent to a large extent, and the work of this Research Centre will have to be closely connected with that of the existing research stations of the Department of Agriculture. The new Centre would study the economics of the small farms and the croft, the social life and its needs, and try to find out in cooperation with the Agricultural Research Station how the needs can be met and solutions found for the troubles of the population. Relief is not cure, and we do not consider that permanent cure can be made by subsidies or patchwork methods.

The basic situation of the farmer must be examined. It is his costs, and the quantity of goods which he can produce for a given expenditure of time and money, which need examination. We believe that in many parts of our land — and particularly in the poorer areas of the North — it is not possible for a small farmer to attain to a reasonable standard of living by the revenue of his farm alone. He needs a secondary form of income in addition. This may be found in many ways which it will be the work of the research centres to discover, and to adapt to the needs and possibilities of the areas concerned. Variety of income can also be achieved in many ways in the small farms of the North

by the supply of the tourist visitor in the summer.

The Forest has a much bigger contribution to make to the life of the country than has hitherto been the case. Certain of the counties in the Highland area are well wooded, but it is certain that greater plantations could be made in almost every part of the region. There would seem to be considerable possibilities for large-scale reforestation on much of the very poor soils of the East and North. We shall give more details as to the possibilities of forest development when we deal with the development of Sutherland.

The whole question of the Fisheries of our country needs an impartial investigation and remedial action. In some cases international action is needed for the works which are urgently required, notably in the protection of the fishermen in the North Sea. Much could be done in Great Britain to help the inshore fisherman. Lobster and crab fishing is of great importance to him, and not enough has been done to see how the fish population could be increased. Better boats and quicker regular transport for the catch is also badly needed in many areas.

The fresh-water fisheries also are in need of help in too many cases. Assistance for salmon and sea trout to ascend the smaller rivers, and dams and other artificial aids for them in the breeding areas, could be given with advantage. But here the question is complicated by the question of the ownership of the land and the fishery rights. We should like — in this connection — to see a great extension of the system of National Parks in the Highlands, which are the country's natural playgrounds.

The tourist industry is already of the very greatest importance to the whole region, and more could be made of it. Many of the smaller groups of farms could not carry on were they not attached to a shooting property. It seems probable that many of these may fall on bad times in the future, and no opportunity should be missed to buy them for the nation. The lodges could be turned into small sporting hotels, which would give increased employment to the people, and greater opportunity for healthy relaxation for numbers of Englishmen. We should like to see the roads widened so that all the coasts were accessible to cars and coaches. It is not necessary to widen all the interior roads, but the coasts at least should be accessible to everyone. An

effort might be made to open new hotels for the August rush in areas where there are none at the moment, so that more employment could be given to those isolated villages and hamlets which have no secondary employment at present.

The interesting household industries of the Highlands need all the encouragement possible in these days of machine-made goods. The local dyes, the local clan colours, all have a great attraction for the visitor. Hand-made goods now find a ready sale, but with an increased tourist traffic this would be still further increased. The interest of the visitor should also be aroused in the history and archaeology of the country which he is seeing. Local art and customs need to be studied and made more widely known. We want to arouse general enthusiasm for the common task of keeping what is fine in the Highland tradition, and at the same time giving new openings to the people to lead fuller and more prosperous lives. We want to give opportunity to the young folk to feel that there is work for them in their homeland, and that they are appreciated. Their local customs are worthy of being retained, and the regional research centres could become focal points on which the whole life of the country would centre and become enriched. We want to arouse the constructive enthusiasm of the people in remaking their own land.

§ 2. *Sutherland*

The most striking feature of the Land Utilisation Report on this county is the way in which everywhere the poverty of the natural resources of the county are emphasised. Here are no rich agricultural lands, no mineral wealth, no great industries and apparently no opportunities for such to be founded. Sutherland has, however, many special characteristics which constitute its great charm and its greatest asset. Perhaps the most remarkable feature of Sutherland is the impression which the traveller receives of quiet, of solitude. In our opinion this is such a rare and precious thing in the crowded world of today, that an area which possesses it in marked degree has a priceless asset, and one which at all costs should be preserved. There are all too few opportunities for man to be alone in magnificent surroundings. Such an area as the Highlands should be regarded as a priceless possession, a heritage of unspoilt beauty and quiet. This does

not mean that no development can be undertaken, but it does mean that careful choice of methods should be made.

In Sutherland the population is mostly found in the eastern area of which Lairg is the centre, on the coasts, and in a few isolated communities in the Straths. Some of the latter might well be transferred elsewhere if the people were willing ; their problems are those of tiny isolated communities the world over. They are expensive to the community, for schools, police, posts and all the appurtenances of modern civilisation have to be supplied for numbers which are too small to justify the cost. Moreover, it has been found in the past that there is great difficulty in assuring to the people a reasonable standard of living without constant subsidies,¹ and, were they gone, the solitude of the great hills would be more completely undisturbed.

Individuality is a marked characteristic of the Highlander, though the " happy clansman " idea has often been rather overdone by a rather uncritical sentimentality. We doubt whether the clansman in a " black hut " was a particularly happy man, with the discomfort, the ill-health, the infant mortality and child misery. These conditions have now almost passed away ; but the Highland character still remains. The only danger to it comes from a policy of subsidy, not from a real attempt to give the Highlander greater opportunities. We must try to keep alive all the independence and individuality of the small farmer, the crofter and the fisherman, while at the same time trying to give him ever greater opportunities for personal betterment. This is very hard to achieve for small isolated communities in the hills. We should aim, therefore, at concentrating the population where we can provide secondary industry to supplement the yield of the croft. Subsistence agriculture will not give a rising standard of living for the people ; and we want to encourage the younger people to stay in their native county and to give their brains, energy and initiative to its further development.

In Sutherland there exists an opportunity to try an experiment in controlled development. We shall, therefore, have to consider the possibilities of the land. The work would be under the direction of the Highland Research Centre at Inverness, but there would be a substation — probably at Lairg — and observers and

¹ See *The Economist*, Dec. 10, 1938, article on the Highlands and Islands.

technical officers at various points in the county.

The first point to be considered will be the land required. There are, of course, many large landowners in the county and a very large proportion of the land is given over to deer forests. It would seem at least possible that, as a result of the war and heavy taxation on large fortunes, the number of those who can afford such luxuries as private deer forests will diminish, and much land will be in the market. Every opportunity should be taken to buy in such lands, and, if it is still impossible to obtain enough, then they should be compulsorily acquired, on a fair compensation basis.

The county falls naturally into three main regions, extending over the interior and the coast. First, the south-eastern slope, of which we regard Lairg as the centre, is the most important economically and will be the most suited to large-scale development. Secondly, there is the north-western section and the high, mountainous interior, containing the greater part of the deer forests, with a very small population and not suitable for development in the sense of taking steps to repopulate the area. Thirdly, the smaller plateau area in the north-east is really a continuation of the similar country in Caithness, and would require development in conjunction with similar schemes in Caithness.

The Land Utilisation Report (p. 142) draws attention to "the great tragedy of the whole country, that of deforestation, shown only too well in Sutherland. Much of the moorland as shown now on the map — particularly in the south-east — consists of rotting tree stumps overgrown with heather, the only remains of large forested areas". At once our ideas turn to the possibility of reforestation, the more so as the forest gives just the opportunity for secondary employment of the kind we require to supplement the yield, too meagre for comfort, of the small farms. We believe that an area of some 400 square miles in this south-east district is admirably suited to a large-scale reforestation project. Japanese larch and Sitka spruce have been planted at Borgie, in Sutherland, and are regarded as capable of accommodating themselves to the poor, peaty soils, such as that large block, to which we referred, on the borders of Caithness and Sutherland. And, generally, we may refer to the Report¹ of

¹ See *19th Report of Forestry Commission*, p. 22.

the Scottish Economic Committee on the Highlands and Islands of Scotland and their Economic Conditions with Recommendations for Improvement, 1938, to which the Commission submitted a memorandum.

In the Commission's 19th Report we read :

" There are very large areas of land in the Highlands of types which, in consequence of recent improvements in the technique of preparation and planting, can now be successfully afforested but which could not have been so dealt with a few years ago. The Commissioners are able, *if funds can be made available* [the italics are our own], to establish forests in Scotland and to create forest workers' holdings, for the permanent settlement of forest workers, on a considerably greater scale than they are now doing."

Another important point relates to forest workers' holdings. The pursuit of forestry must for them be in some measure a part-time occupation, and a secondary source of income is desirable, as we have seen, in dealing with Sutherland. The Commission's Report, referred to above, gives ¹ some useful figures as to the cost of forest workers' holdings, indicating a return on investment of about 3 per cent, a return which only a body like the Authority could contemplate. These figures may be compared with similar figures given in the Report of the Land Utilisation Survey dealing with Sutherland.

The efforts which were made by the Dukes of Sutherland in the last century to reclaim big blocks of arable land in this part of the county met with only a qualified measure of success. While some of this land is still under cultivation, a large-scale forest project would probably meet with greater economic success than large-scale agriculture. The workers in the forest would be centred in the valley in groups where they would be accessible and the various centres of a modern civilisation could easily be supplied. They would each have their small croft of a few acres of improved land. Certain machinery would be owned by the Authority and could be hired out to them, and cooperative marketing would be easy to organise.

There is a very considerable tourist traffic in the region during the summer, and eggs, fresh fruit and vegetables are, of course,

in request. Moreover, openings for the sale of hand-made articles exist, and some of the best blocks of land could be kept for shooting. Nobody who has seen the really magnificent timber round Rosehall, or in the areas round Rogart, could doubt the success of the forest. At the same time, research would be directed to the difficulties of the farmers of the area, sheep disease, etc.

The fisheries also, to which further reference will be made, would be studied. At Lairg there is an excellent instance of a project which could be made to give considerable service to the district. The Falls of Shin are a serious obstacle to the salmon, and completely stop the sea trout from ascending the river. It seems certain that Loch Shin would be well adapted to these fish, and that the streams which feed it would provide ideal breeding-grounds. A fish pass could be constructed round the falls without in any way harming the natural beauty of the spot. This should be done, and the natural stock of salmon and sea trout increased by hatcheries. We must not ignore the inland fisheries. They can be made to supply much good food for everyone, and much healthy sport for some. A great deal could be done in the smaller rivers of the Highlands to improve the stock of fish and to help the salmon and sea trout to breed. Small dams or artificial runs in the shallows, etc., can be cheaply and easily constructed.

The north-east area is a black and desolate landscape. Here, also, certain blocks would be useful for forest. There is an area of some 300 square miles in Sutherland — and much more in Caithness — which is at present useless for any purpose except for sport and a few sheep. We do not know if the winds are too strong for successful forestry, but feel that a series of carefully planned experiments should be put under way to try out the possibilities of the area. It would seem that by planting wind-breaks, making use of natural features and so forth, considerable blocks could be brought under control. These would be of great service to the local inhabitants, and would provide shelter from the cold winds. Gradually the planted areas could be extended, and such as were quite impossible would, of course, be left for the sportsman.

The coasts of the north and west do not seem suitable for forestry development as the soil is too sparse, except perhaps in a

few places near Tongue. Here we meet with a very poor country, which must probably depend for secondary income on fishing and on the tourist. But the road which runs around the coast is in many parts far too narrow. It should be widened to enable cars to pass everywhere, and every effort should be made to help the tourist to visit this most beautiful bit of coast. The hotels are small and cater chiefly for sporting visitors. We do not want to spoil their charm, and yet more accommodation will be wanted if the roads are to carry a heavy traffic in the summer months.

The Authority could, perhaps, build new hotels, for instance, near an isolated community like that at Eriboll, to meet the casual requirements of tourists. Such could be let by the Authority to a contractor. There is not at present the traffic to justify the building of an hotel by private enterprise, but once built, in the spot where it would be of most use to the people, it would probably draw the traffic. Eriboll is a beautiful spot. The loch would provide safe and good boating ; the local community is badly in need of some secondary industry, while the quiet fishing hotels round about would be enabled to preserve their quiet.

In the same way, we should not recommend that the roads in the interior of the last area to be mentioned — the north-west — should be widened. Here we are dealing with the home of the deer. There is no need to make all our roads accessible to the many who do not seek quiet. We suggest that this whole area should be bought by the Authority. The existing shooting lodges could be turned into small, quiet hotels for those who seek health in lovely surroundings. The small communities, which are now supported by the employment given by the sporting tenant, would find the same employment when attached to the hotels.

§ 3. *Fisheries*

There are a number of cases in this country outside the sphere of controversy where relatively simple steps need taking, but are not taken, because an overworked Department is obliged to wait for decisions on policy. These are cases where no large amount of capital is needed, but chiefly organisation. And yet, if they are well handled, cumulatively they make a great deal of difference. They represent just the type of activity in which the Authority is best fitted to engage, and to which Mr. Hall refers in his

suggestions for applying the initial impetus towards raising standards of living.¹

One such case is that of the lobster fisheries, to which attention is drawn in the Report of the Committee of the Economic Advisory Council on the Fishing Industry, 1932.² We read on page 90 that

“Lobster fisheries play an important part in the economy of the inshore fisheries both in England and Scotland, where they are caught mainly by crofter fishermen of the North and North-West.”

And again on page 91 that

“The Fisheries (oyster, crab and lobster) Act, 1877, prohibits the capture or sale of crabs less than $4\frac{1}{2}$ inches across the back, or of lobsters which measure less than 8 inches in length. Corresponding measures of protection are in force in Scotland. Protection is also given to ‘berried’ crabs but not to ‘berried’ lobsters, except in certain localities. (A berried lobster is a female lobster to which eggs are attached beneath the tail. From 10,000 to 12,000 eggs are carried in this way, which may take as long as twelve months to hatch.) In England and Wales the Fisheries Department have always maintained that any attempt to protect the latter would lead to an increase in the practice of ‘stripping’, *i.e.* the removal of the eggs by the fishermen. . . . Of late years the Fishery Board for Scotland have paid considerable attention to the question of how best to encourage and develop lobster fishing, particularly on the west coast of Scotland. . . . As a result of the Board’s activities lobster fishing has now become in many localities as intensive as the stock of fish available will allow.”

The Committee suggest various methods of storing lobsters for sale in bad weather, etc., but no means of increasing the stock of fish. It might, perhaps, be considered good policy for the “berried” lobsters to be bought at a rather higher price than that paid for others. They could then be planted in breeding-ponds and fed until they hatched their eggs, when they would be released. The young would be fed until they could fend for themselves, and also be released. A great many lobsters may be stripped now, and sold in the absence of protection. At the same time, the objection of the Department to protecting is obvious. It is no use passing laws which cannot be enforced. The idea should be to make the catching of a berried lobster a better prize than any other.

¹ See p. 8.

² Cmd. 4012.

The Report also contains a number of suggestions with regard to mussels, oyster-beds, etc., all of which are just the kind of things which the Authority could take up. The inshore fisherman needs help, but the present conditions of the industry are such that such help would entail considerable expense. The Committee are not in favour of such help being given, and with this view we are bound to agree. The men should be encouraged to go in for deep-sea fishing or to look on the inshore fishing as a part-time job, which of course it is in so many cases. The fish they land thus are fresher than deep-sea fish, and so this might prove to be an asset if they were simply to supply local markets such as summer resorts.

II. THE DOMINIONS AND DEVELOPMENT ¹

The Dominions are fully self-governing and equal partners in the Commonwealth. Any approach to their problems, similar to the suggestions which we have put forward for the Colonial Empire, might justifiably be regarded as savouring of impertinence. Nevertheless, to omit them from conference on these matters might equally be misunderstood and resented. An institution like the Imperial Development Authority might, however, prove very useful in supporting and widening the scope of Dominion development work. It could help, if called upon, and promote cooperative effort where needed. The Dominions have eagerly cooperated in the unfruitful work of war, and would probably welcome the opportunity of cooperating in developing the resources of our common heritage. The many problems of trade, the difficulties of surplus crops, of soil erosion and competition for export markets and so forth, are common to us all. An institution which existed to study these problems, to find ways of

¹ The problems of India are so immense and of such absorbing interest that they would require a volume to themselves. But we may venture to suggest that *the* greatest problem of all, overshadowing all the disputes of the politicians about constitutions, is that of poverty. That would be the sphere of the Development Authority; its methods we have already indicated; its success might well render the other problems less intractable. See *India and Democracy*, by Sir George Schuster and Guy Wint (Macmillan, 1941).

Of Burma we have written above (see p. 99 *et seq.*), because her problems, which are an immediate responsibility of H.M. Government in the United Kingdom, are more nearly akin to those that faced us in our survey of Colonial problems.

obviating distress and helping adjustment, might well win recognition from Dominion statesmen. The Imperial Authority, with adequate capital to back its efforts, could render immense services to all the independent nations of the Commonwealth.

The Dominions might be consulted while the Imperial Authority scheme was being worked out. They might see fit to organise Development Authorities of their own on the same model — more or less — as the Imperial Authority, and this would assist the growth of a common point of view. The work of the Imperial Authority would be greatly facilitated and extended much more rapidly, if parallel organisations and similar research, and similar approaches to common problems, were being made in every member of the Commonwealth group. One of our major objects is to encourage a cooperative approach to common economic problems. Again, a considerable difficulty would confront the Authority in finding officers for the administration of its projects, with the necessary width of outlook and range of technical knowledge of many and various subjects. A special group of training colleges will probably be needed to produce these men, and here at once we find an opportunity for cooperation on an Imperial scale. The Imperial training scheme for the Royal Air Force suggests the possibility of a similar scheme to train development officers. The Dominions could each have their training colleges for their own needs, while the Commonwealth could found and endow by contributions from all the Dominions, Great Britain and the Colonies — somewhere in the Empire — an Imperial Economic University where the training requirements of the whole would be considered. On the post-graduate side, Nuffield College exists to promote the cooperative study of economic problems ; but, with this as a model, undergraduate colleges of the required type could be built up all over the Empire. Our definite opinion is that the focus of this Imperial University should not be situated in England ; Canada might perhaps be the venue.

The actual work of the Imperial Development Authority in the Dominions would probably lie more especially in the direction of coordination of development rather than of undertaking work ; that would be carried out by the Dominion authorities themselves. Moreover, it would facilitate a general exchange of information

as to the changing needs of each partner ; study of the trends of industry, efforts to find ways whereby in each several State production could become complementary rather than competitive, and the agricultural system, forestry, mineral developments and industrial progress could develop to the common good.

The supply of capital for wide schemes beyond the power of a Dominion could be shouldered by the Imperial Authority, and organised on sound lines in agreement with the Dominions and Colonies concerned.

CHAPTER V

THE THINGS THAT INVOLVE COOPERATION WITH OTHER NATIONS

A. DEVELOPMENT ON A REGIONAL SCALE

WE have passed in review a few of the problems which affect the Empire, and we have attempted to outline a method by which some progress might possibly be made towards their solution. These were all things which the Commonwealth could do itself. Here, the partner nations could study their own problems and devise their own solutions ; the results and the example of success — if attainable — would be visible to all. The same methods might perhaps be extended to the attack on other problems which will be pressing for solution in the post-war world, which the British cannot tackle alone. In many cases, the facts of geography compel us, quite inescapably, to depend upon the goodwill of our neighbours ; and, in the interlocking affairs of modern commerce and economic development, this is becoming increasingly the case. Politically, frontiers are so drawn that they divide complementary or interdependent geographical regions. "We must find a way to diminish the economic importance of political frontiers." This is very notably the case in Africa.

Lord Hailey has put the point very clearly concerning the importance of having an authority competent to study inter-related problems affecting a whole region.¹

"Perhaps no area in the world offers more conspicuous proofs than are to be found in Africa of the necessity for recognising the close interdependence of all scientific effort. From the ideal standpoint, all the agencies for research into problems arising in the African Colonies should be closely coordinated, and the human and financial resources available should be apportioned by an authority capable of judging of the relative urgency of the different subjects requiring investigation."

¹ Lord Hailey, *An African Survey*, p. 1624. (Oxford University Press.)

§ 1. *The Nile Region*

The problem of Egypt is, as it always has been, the problem of the Nile. In her progress towards a higher standard of living she is faced with a growing deterioration of her great asset, the soil, made apparent by increasing "soil alkali". A search for the remedy will reveal the fact that the interests of the various countries bordering on the Nile are more or less immediately involved, and any consideration of what measures are practicable will confront us with a series of fresh problems demanding solution.

Two things will emerge from the discussion ; — first, that only with cooperation on the part of all concerned is any attempt to solve each country's problem possible ; and, secondly, that intensive research, organised for the region as a whole, is an essential pre-condition of the solutions.

The situation in Egypt is thus described in *The Rape of the Earth*, by Jacks and Whyte, p. 211 :

"Recent erosion in India and soil deterioration in Egypt must be attributed to the impact of the western type of social organisation on other types which had attained equilibrium with the soils on which they had evolved. These two countries support very dense populations, yet they have preserved their fertility through thousands of years by the peoples accepting an economy which precluded a standard of living above what the soils could afford. As population increased the standard of living tended to fall, until science and civilisation showed how more wealth could be extracted from the soil than was restored by natural processes. Egyptian life centred entirely round the Nile, without whose water and mud there would have been no soil at all. The brilliant achievements in irrigation engineering in ancient Egypt may be contrasted with the primitive agricultural technique which is still practised. The ancient Egyptians learnt how to spread on the land the fertility brought down by the annual Nile floods. They did not exert themselves to extract more than their immediate needs from the bounty of the river. They lived on the soil's income and won lasting security against natural hazards at the expense of progress.

"With the introduction of a more efficient technique in Egyptian agriculture, the soils have steadily deteriorated. 'Soil alkali' has become a serious and growing menace, cotton yields are falling. The deterioration has been due in the main to the substitution of perennial for basin irrigation — a substitution by which Egypt has advanced and enriched itself. Basin irrigation involved an annual five-months

fallow (*sharaqi*) during which essential fertility-preserving processes took place ; perennial irrigation means foregoing the fallow and taking as much from the soil as it can be made to yield. Egypt's advance from primitiveness to modern civilisation is being bought with soil fertility."

Here we can see clearly the great difficulty which faces a government which has the good of its people at heart. Can it advise them to forgo a rise in their standard of living in order to gain greater security and to benefit their soil ? Can it advise them to give up or to reduce their most profitable crop ? Can it enforce such a decision, if need be ? What remedy exists ?

We may admit at once that a reduction in the quantity of cotton grown at the moment would not be a grave disaster. But we must recognise the truth that, if we would raise the standard of living in an agricultural economy, it is essential in the long run, not only that numbers of the population should be controlled, but also that the land should be made to produce more and more goods for consumption and for export. There must be an increase in the land available, an increase in the productivity of the soil, and an actual increase in production. Intensive research and experiment is needed at once into the causes and the remedies for "soil alkali", and into the possibilities of alternative crops and alternative systems of agriculture. An endeavour should also be made to see whether more land could be brought under cultivation to allow of more acreage per head of the population.

In Egypt, however, this means more water ; for more land could in fact be made available, if there were water to irrigate it. But the provision of more water now depends upon the control of both the White Nile, along the whole of its course from the headwaters around Lake Victoria, and the Blue Nile near Lake Tsana, or at some point or points in the gorges below Lake Tsana and the Sudan frontier. This has been shown by Sir William Garstin, G.C.M.G., in his great work entitled *Report upon the Basin of the Upper Nile*, to which is attached a report upon Lake Tsana and the rivers of the Eastern Sudan by Mr. C. Dupuis, published in Cairo in 1904. This classic report, and the many others¹ which have followed it, contain clear and detailed

¹ See also Sir M. Macdonald, *Nile Control*. (Cairo Government Press, 1920) ; H. E. Hurst, *The Lake Plateau : Basin of the Nile*. (Cairo Government Press, 1920) ; R. E. Cheesman, *Lake Tana and the Blue Nile*. (Macmillan, 1936.)

descriptions of the countries and of the problems involved ; but we still do not yet know enough about the whole question. Much further investigation is required. The data, for instance, would have to include the results of a careful study of the rainfall system of the great Lakes region. While we know that the evaporation from the surface of Lake Victoria approximately equals the precipitation of rain upon it, the sources of the rain supply to the Central African region are as yet incompletely known. Some rain must reach the area from both the Atlantic and the Indian Oceans ; and this quantity must be at least equal in amount to the outflow of the Nile together with that amount of rain, which, due to evaporation within the system, falls outside the drainage area and so is lost to the system. But we cannot even yet estimate how much of the rainfall of the country surrounding Lake Victoria is due to a re-precipitation of the water evaporated from the Lake itself, from Lake Kyoga, and from the great swamps which surround and feed them.

It would certainly be possible to control and to increase the flow of the Nile by lowering the level of Lake Victoria at Ripon Falls ; while by lowering the level of Lake Kyoga also, considerable saving of water would be made and the flow still further increased. These great shallow lakes would, moreover, shrink very considerably in area for a comparatively small drop in their levels, and thereby large areas of very fertile lands would be made available to cultivation both in Uganda and Kenya, and to a lesser extent in Tanganyika also. But, if by so reducing the area of water available for evaporation we were to lessen considerably the rainfall over the surrounding country, we should have gained little ; we should at the same time have reduced the productivity of the whole, perhaps dangerously so.

In fact, it is obvious that the closest study would be required before any action could reasonably be taken. There seems, however, little doubt that the effect of the works proposed could be estimated without much difficulty. Such an estimate would also, in addition to the possibility of the control at Lakes Victoria and Kyoga, have to take into consideration the outlet from Lake Albert. Here there would be an opportunity for a barrage to raise the level of this lake and to store the flood waters, increased now by the inflow of the Semliki. But if the barrage were to be

constructed, considerable areas of land would be inundated and the lake ports of the Belgian Congo would be put many feet under water. The cooperation of the authorities of the Belgian Congo would consequently have to be sought. We should also have to consider the loss of water from evaporation, as the area of the lake would be considerably extended, the land being flat on the east side and also at the south end where the Semliki enters. Here, again, the need is for exact measurement and calculation, and a study of the salinity of Lakes George, Edward and Albert is also wanted.

Moreover, a railway would be required to the site from the present railhead at Soroti in the Eastern Province of Uganda. This railway would have the effect of opening up the backward West Nile Province of Uganda, which has been much handicapped hitherto by lack of direct communication with the sea. We might also see the extension of such a railway to Rejaf and Gondokoro, on the Nile in the South Sudan, thereby reaching navigable waters below the rapids between Nimule and Rejaf, and tapping great areas of fertile country which have been similarly held back by transport difficulties. Incidentally, once across the Nile, the railway could be extended to the Belgian Congo to tap the rich mining areas of Kilo and Moto, and the potentially rich agricultural country in the whole Eastern Congo.

But when the control of the Lake region is being considered, we must also pay attention to the waste which takes place between Gondokoro and Khartoum in the vast swamps of the sudd. Sir William Garstin, in 1904, suggested that a new channel might have to be cut to straighten the river here and avoid the swamps altogether. Since his time, the sudd has been cut through and is now freely passed by steamers. But great waste of water still takes place. Further investigation has, of course, been made and a great number of admirable reports have been published by the Egyptian Government; but investigation would have to be carried further and plans would have to be drawn up envisaging the control of the whole river from the sources to Khartoum.

With regard to the Blue Nile, there would now seem to be no formidable political difficulties in the way of a scheme for its complete control. Lake Tsana has often been suggested as the site of a control work. While clearly it has many advantages,

there are also some objections. Any considerable rise in the lake level would inundate the many islands which are sacred places to the Abyssinians, and on which there are many ancient monasteries. The site for the dam also presents some technical difficulties, though these are probably not insuperable. But, down-stream in the great gorges which stretch for 450 miles to the Sudan border, there are believed to be at least two points¹ where suitable dam sites exist ; and there are probably more which have not yet been remarked. Here silt would cause difficulties, but in the case of reservoirs which were to be completely emptied each season, there might be ways of constructing dams where silt was not a difficulty. The water of Lake Tsana, for example, where a *low* dam might be constructed, could be used to flush out the silt of the main reservoirs. This silt could then be impounded at some convenient point down-stream in the uninhabited gorges.

The establishment of necessary control works for the Blue Nile is Abyssinia's one direct interest in the more intimate problems of the Nile basin. We shall deal presently with a wider aspect of North-East Africa, which embraces Abyssinia as a whole and other territories on the fringe of the Nile Zone (see p. 128 *et seq.*). Here we are concerned with the countries more directly affected by the river ; and one important point to bear in mind, in dealing with the Nile problem as a whole, is that, to realise the full value of the works proved to be necessary for limited objects, there should be scope for a large development of countries bordering on the upper reaches of the river, in addition to the direct benefit to Egypt.

Uganda is a case in point. There are considerable areas of swamp which could be drained. While this work would not necessarily be an integral part of the Nile control problem, in many cases, though not in all, it could not safely be attempted without reference to the general problem of the rainfall of the region of the Great Lakes, which, as we have seen, is a crucial factor in Nile control. The effect of such drainage in Uganda on the rainfall would have to be taken into account.

It is worth while, in passing, to indicate how drainage might affect development in Uganda — in other areas than those affected by the control schemes for Lake Victoria. In the Rukiga

¹ R. E. Cheesman, *Lake Tana and the Blue Nile*, p. 373. (Macmillan, 1936.)

Mountains country, in the south-west of Uganda, the tribes — until very recent years — practised shifting cultivation, and still do so where they can find room to move and forest to destroy. But much of the land has now been under constant cultivation for some years, and is beginning to show declining returns. The steep slopes are very prone to erosion, once the humus content falls ; goats, cattle and sheep are on the increase, and, with the elimination of the forest, fuel is becoming increasingly difficult to obtain.

The large swamps in the valleys can, however, be very easily and cheaply drained. These would provide a most valuable reserve of very fertile soil, and could be used in places to increase the arable land available, and in places to yield intensive grazing. The steeper slopes should then be taken out of cultivation or terraced. Many parts could be re-grassed, and in places trees should be planted to help to stop the erosion and provide fuel. But, provided that the numbers of grazing animals could be controlled, it would be possible to breed better beasts, to secure the adoption of better methods, and perhaps to introduce new crops.

In the Northern Province, also, the problems of over-grazing and erosion reappear. Here the conditions approximate to those of Kenya, though the ruin has not been allowed to go so far.

Into this picture we can fit provision for the prospecting for minerals, the existence of which in this region is inherently likely, and the possibility of generating cheap power at the control points of Ripon Falls, or at the famous Murchison Falls. Similarly, in other territories of the Nile basin, the control measures indicated would form the basis of sound development.

Subject, then, to the complete elucidation of the one factor not yet precisely evaluated, namely the rainfall, we have here in brief outline the elements of a scheme of control for the Nile. Starting with a vital need of Egypt, it is seen to require the active cooperation of the authorities of all Nilotic territories and to promise them fruitful results. The Sudan, Uganda, Kenya, Tanganyika Territory, the Belgian Congo and Abyssinia, all have a direct interest in the great river. Their cooperation will be needed if the problem of Egypt is to be solved. We have already said that the problem may be generalised as one of too little water at certain seasons to satisfy the demands which all the

interested territories may put upon it. It offers a perfect example of the difficulty of finding a rational solution to a problem, which appears to be isolated and to affect only one country, without raising problems of the widest character, which demand for their effective solution cooperation on an Imperial, indeed an international, scale.

We may ask — Who would pay for such a vast control scheme? Clearly Egypt could not be expected to pay for railways which would be to the great benefit of other countries. Uganda could not pay for the works of control of the lakes Victoria and Kyoga, which, though to her benefit by increasing the land available, were primarily to be undertaken for the water supply of Egypt. Manifestly here we need cooperation on the widest scale, — a fitting work of organisation for the Imperial Development Authority. To coordinate the whole of the task with the internal development of Abyssinia and of the ex-Italian Colonies of Eritrea and Somaliland, a Regional Development Authority will clearly be required (see below, p. 131). Then again, the necessary research would clearly benefit all the countries concerned, for which all should pay their due share. The barrage would serve Egypt, while the railways would serve them all. The Regional Development Authority would probably make separate agreements with each Government concerned, to be combined into a “Charter of the River”, under which the Authority would work. Egypt would agree to pay for increased flow of water at the seasons required, while the agreement with Uganda would provide for ownership by the Authority of the land which it drained and which it would be at liberty to lease to native farmers. The railways would probably be constructed by the Authority and leased by it to the Kenya and Uganda Railway to operate.

The Authority, moreover, would be in a position to undertake the development of hydro-electric power, which might serve cotton mills, other industrial plants and metal refineries, and might even supply current for railway electrification, if with increased traffic this should become a possibility. Ripon and Owen Falls, five miles apart, could develop without difficulty some 100,000 h.p., while the power available at Murchison Falls is reputed to amount to over 500,000 h.p. At the Tisisat Falls,

on the Blue Nile, similar powers are available, when use can be made of them.

In considering such a vast scheme, we find that a host of allied problems and opportunities are raised by the apparently isolated problem of "soil alkali" in Egypt. There is a great chance here for fruitful cooperation, and, after due research and exploration, the launching of a project which would envisage the control and utilisation of the whole geographical entity represented by the Nile Basin. "What fun to make the immemorial Nile begin its journey by diving through a turbine!"¹

§ 2. *The Euphrates-Tigris Region*

While thinking of river control, we are naturally led on to that other great river land, Iraq. Here, the problem is rather one of too much water in the wrong place and at the wrong time. The question is one of flood control and drainage rather than of water conservation. As H. V. Morton, describing in *Middle East* (p. 165) the country south of Baghdad, once known as Babylonia, says :

"Agriculture has always been impossible in this land unless the flood-waters carried down in the spring by the two rivers [Euphrates and Tigris] are retained and used to water the land during the dry season. . . .

"At the present moment (1936) engineers are tackling the problem of irrigation, but it is not an easy one. The river-beds have been ruined by centuries of neglect. Water has been tapped to serve individual needs in a way which makes it impossible for the rivers to scour their beds properly, and canal-cutting, which has gone on without plan, has diverted the flow of water and helped to cause floods. Thus the restoration of Babylonia to its former prosperity presents not one problem, but hundreds, and not the least important is the problem of population."

Here, also, we see the need for the wide view, and for cooperation on the international scale between all who are concerned in the rivers. In all probability, the great and dangerous floods of the Tigris and Euphrates cannot be controlled effectively and permanently unless control of the headwaters in Turkey, and on the border where Turkey, Armenia and Persia adjoin, can be established. This means the re-grassing and — where it is

¹ Winston Churchill, *My African Journey*, p. 183. (Hodder & Stoughton, 1908.)

possible — the reforestation of the hills from which they spring. Turkey, Iraq, Russia and Persia would have to cooperate in a comprehensive programme of conservation and judicious development, which would certainly be on too vast a scale to justify detailed consideration until the war is won. Yet something might be done with the help of the present rulers of these countries to prepare the way. Something could also be done by Iraq itself, and indeed is being done. Big diversion schemes to help to control the flood are under construction, and more are under consideration.

But, for the best results, a scheme on a much greater scale is required, and one which takes into consideration the whole of the river basins, from the sources in the Armenian mountains to their mouths in the Persian Gulf. It would be an appropriate task for our proposed Imperial Development Authority, if the cooperation of the Governments named could be secured, to undertake a complete survey of the whole region, its people and its potential resources. Recommendations could be worked out for the complete utilisation of all these lands, for their re-grassing and reforestation where this was desirable and possible. The Hills of Kurdistan contribute in no small degree to the floods of the Tigris. These barren, deforested hills, with a backward and poor population, have long been a thorn in the side of whatever government has been in power in Iraq. It is the old tale of the frontier, so familiar in India, of the poverty of the hills in sight of the riches (comparative at any rate) of the plain.

Here is an obvious opening for a long-range constructive policy. The oils which Iraq is now exploiting offer a source of revenue now, but once extracted this is an asset which is gone for ever. Is it altogether too visionary an idea to imagine how this revenue could be used to pay interest and sinking fund on an Imperial Development Authority loan to be used for the redevelopment of the whole country, in a great systematic programme of land utilisation, irrigation and drainage, agricultural improvement and flood control? Better husbandry and better agriculture, in this land where husbandry and agriculture first began, could build up permanent assets for the use of man, enriching the life of the peoples for long years after the oil has all been won.

Is it too much to hope that, by the help of Great Britain, Kurd, Irani, Turk and Iraqi might one day find common ground in the great works involved? But a positive, constructive lead must be given. One of the tasks, and assuredly not the least important, of the Imperial Development Authority should be this, — to find common ground in which all can share.

§ 3. *Other Regions in Africa and South America*

Few questions in recent years have been the subject of more polemics and less clear thinking or constructive suggestion than the “ownership of Colonies”. It should be recognised that the question whether Colonies show a profit is quite secondary. The plain fact is that no nation is at all likely to consent to hand over any of its Colonies to another, either voluntarily or, indeed, without suffering defeat in war, or at least under the immediate threat of overwhelming force. Cession of territory is closely associated with defeat and national humiliation.

Colonies often are a great asset to the trade of the metropolitan country, and any rapid advance towards the policy of the “open door” will be impossible of attainment. It would mean a revolution in the tariff policy of some countries with Colonies. In our own case, any attempt to abandon suddenly now the policy of Imperial preference, would lead to considerable unsettlement and meet with very serious opposition. It would lead immediately to the dominance in some of our important markets of the extremely cheap goods of Japan. We should, however, pay attention to the incidental effects of our policy, and to the fact that serious hardship is caused to the native inhabitants in some cases. We may instance the case of cheap Japanese shoes where the incidence of prohibitory tariffs upon the Japanese articles has had the effect of depriving many natives of the possibility of purchasing footwear at all. It is of little use our spending large sums on expensive programmes of medical attack upon hookworm, when one of the chief preventive measures necessary to guard against re-infection — the wearing of shoes — is rendered impossible for the poorer natives by our Imperial economic policy.

Certain countries have endeavoured to retain the sole rights of development and even of residence for their nationals, in part

by a policy of direct discouragement of the foreigner, and in part by subterfuge. The reasons again are not far to seek. A small nation, with large and potentially rich possessions, has every reason in the world of today to fear the power of her neighbours. Too often economic penetration has meant the beginning of political dominance. Yet an exclusive policy must mean the gravest delay in the opening-up of the undeveloped possessions of the lesser nations, their population too small to supply the man-power, and lacking the capital needed to ensure rapid and sound development.

East Africa

In East Africa there is a case in point. The Portuguese have large undeveloped territories which they have been as yet unable to develop effectively. Naturally, they have been afraid that unlimited penetration by foreign capital and immigration would in time lead to the dominance of the stranger in their possessions. They are proud of their Colonies, and have jealously tried to safeguard their control by very close circumspection of foreign penetration, whether by investment, immigration or trade. This policy will become increasingly difficult to maintain when the world at large is more and more in need of free access to Colonial territories. Portuguese East Africa, British Nyasaland and the southern districts of Tanganyika form a natural unit, and should logically be developed as one. We are left to wonder whether a World Development Authority might not be able to find a way of ensuring more effective and rapid development by the subjects of all nations who were members of such an Authority, and, at the same time, of safeguarding the rights and the national pride of Portugal.

Abyssinia

An experiment in international control of economic development might perhaps be made in the case of the East African Region — where we have been invited by Abyssinia to furnish assistance, and where the conquered Italian Colonies now require reorganisation.

As we have pointed out, Abyssinia is a country which would be intimately concerned in the operations of a Regional Develop-

ment Authority formed to handle the problems of the Nile basin. The latter affect not only Egypt and the Sudan, but also the Congo, Uganda, Kenya, Tanganyika, Abyssinia, the Somalilands and Eritrea. The Jibuti railway and port and even the Suez Canal are involved. In fact, the problems of the Nile basin are problems of the whole of North-Eastern Africa.

Quite clearly it is a case, where a magnificent opportunity exists for various national interests to cooperate for the good of all in work which in varying degrees is the concern of all. The ultimate ideal, bearing in mind that the work must — as we have insisted in other cases — be visualised in the long term, would be for a Regional Development Authority to be formed for North-Eastern Africa (Nile basin) under the aegis of the World Development Authority. As several of the territories involved are either wholly or partly under the control or influence of H.M. Government in the United Kingdom, an interesting problem would arise at once in adjusting the precise degree of responsibility of the Regional Authority towards the several territories. As a suggestion, the Directors of the Authority might consist of one each for Egypt, the Sudan, Abyssinia, Italian and French interests; five for purely British interests, with an American or Dominion chairman. Any works or measures required in British or British controlled territories or interests could be carried out by the Imperial Development Authority as agent for the Regional Authority, and acting in liaison through its Foreign Branch. The Regional Authority would be directly responsible for the rest, its function in relation to the Imperial Development Authority being more of a coordinating character. It would, no doubt, need a high measure of skill, goodwill and intelligence to make such an organisation work successfully; but, if the respective Governments *meant* it to work, it *would* work.

Any schemes in connection with the Great Lakes would be dealt with by the Imperial Development Authority through a subsidiary, as, of course, would any scheme for irrigation works on the Tana River in Kenya, affecting as it does Kenya alone. All the British territories, as we have seen, have soil and erosion problems, which would require local treatment. But the rest of the territories concerned have similar problems, and the Regional Authority could view them as a whole and devise the necessary

general policy ; the locust problem, moreover, is common to all.

It would obviously be desirable for the Regional Authority to coordinate the very necessary works of Research, Survey and Experiment for the whole region. Communications again, which — as we have insisted — are one of the primary needs in the civilising process, and in the case of Abyssinia are a limiting factor, should clearly be chiefly the responsibility of the Regional Authority, which ideally should take over the port of Jibuti and the railway thence to Addis Ababa, if arrangements satisfactory to the French owners could be made. This railway, begun in 1897, was finished in 1918. The train kilometres run, which were 523,499 in 1920, were 928,917 in 1929, while gross receipts of Frs. 10,587,809 in 1920 had risen to Frs. 39,224,058 in 1929. If, as we suggest, a Regional Development Authority were to take Abyssinia in hand, with the large view in the long term that we have advocated, it needs little imagination to foresee a vast improvement on these figures. Under a systematic development of the interior, and with a properly thought-out nexus of branch lines and roads, the trade of the country would expand, with benefits to standards of living. In return for its expenditure on roads, the Authority might be given the proceeds of taxation on petrol, oil and motor vehicle licences. It would be in a position to see that the Abyssinian transport system would be coordinated with the systems of the neighbouring territories, and related to the future of the ports of Massawa, Mogadishu and Kismayu, and connections made with the Sudan. It would probably have to establish markets, and maintain control over the activities of traders. Permanent market buildings could be erected and rents charged for stalls ; and the usage of all lands for a radius of, say, two miles from the market should be under the Development Authority.

The Italians were apparently disappointed with the results obtained from search for minerals. Judging, however, by results obtained in contiguous territory as the result of thorough-going search, and by what is known of the geology of Abyssinia, it is possible that this disappointment may prove to be unjustified, and that systematic and intelligent prospecting may reveal payable ore bodies. That is one reason why survey should begin at once, with as a first instalment the accurate mapping of the country.

One of the chief objects to which the Authority would have to devote its attention in Abyssinia, would be to develop the water resources of the Blue Nile. This, as we have mentioned, is not primarily an Abyssinian problem, as the works would be undertaken for the benefit of the Sudan and Egypt, and the regional character of the Authority precisely provides for consideration of all these interests. We need not go into details of this project here, as we have already discussed it in connection with the Nile control. Unlike Africa as a whole, which has a low population figure per square mile, Abyssinia has a comparatively large population for its area, like Uganda and Nigeria ; and this fact should provide a good basis for systematic development.

But, in addition to direct responsibility in Abyssinia and its indirect responsibilities in neighbouring territories, the Regional Authority would assume control of development in the former Italian Colonies. Irrigation possibilities in connection with the rivers Juba and Webi Shebeli would justify close attention. Much has been done by, and can be learned from, the work of the Italians on the latter, but the Juba offers immense possibilities and involves a very great area of country and a great volume of water. A pastoral as well as an agricultural industry might be served. The river is the centre of a narrow strip of tsetse-fly infested country, and it might be possible for the pastoralist outside the fly-belt to exchange products with the irrigated lands within ; not to mention the reduction in fly possible as the result of intensive development of the whole country.

But Abyssinia cannot wait, nor can the urgent work of survey and consideration of communications. Time would be required to establish a full-fledged Regional Development Authority of an International character. Meanwhile, developments are occurring in the process of war which may be used to link the present with the future, and organisations exist which may serve for the time being to start the work pending the establishment of the Authority, provided that the long-term policy covering decades is kept clearly in view as a goal. Our suggestion will be found to be that the organisation through which the Colonial Development and Welfare Act, continuing the work of the Colonial Development Fund, operates, should at once be constituted as a Development Authority, remaining temporarily under the

Secretary of State for the Colonies. Its aim should be directive and not merely censorial, and the ultimately large scale of its work should be established from the start. It could then be entrusted with the preliminary work in Abyssinia, and its first step should be the setting-up of a Commission to establish what is known, and the gaps in knowledge, and to arrange for a preliminary quick survey, on which a more permanent survey could be based ; and with the aid of which a tentative scheme could be worked out and the main lines of systematic, scientific development could be laid down. Gradually, as experience was gained, the method of transfer to the ultimate Regional Development Authority would begin to take shape.

West Africa

In West Africa, the natural geographical regions which the river basins form are divided into a patchwork of political possessions which necessarily hinder the trade and development of the land, and do serious harm to the interests of the inhabitants. The economic progress of the continent would be greatly helped by closer cooperation in economic matters between the nations concerned, and in particular between France, Great Britain, Belgium and Portugal. Perhaps this may not be impossible of achievement in the future. The ridiculous state of things at present may be illustrated by the case of a mineral lode which lies partly in British territory and partly in the territory of a foreign power (" No names, no pack drill ! "). This, though potentially of great value, cannot now be worked, as, while the major portion of the lode lies in our territory, we can only approach it across a difficult range of mountains, and the lie of the land at the mine would render working expensive and difficult from our side of the boundary. From the foreign territory, however, access is easy and working would be cheap, but the foreign power controls only a very small portion of the lode. Naturally it lies unworked at present, and will continue to do so until a drastic change can be made in the conditions demanded by the foreign power. It is thus quite useless to both parties. A further example may be given of a large stream which is known to carry alluvial gold, but which forms the boundary between two Colonial powers.

For technical reasons it is impossible for either to work the deposit or even to prospect it thoroughly, unless physical control can be obtained of both sides of the stream, in order to make it possible to divert the stream and so prevent water seeping into the prospecting pits. At present this control is unobtainable.

South America

In South America problems exist, where great regions have only a tithe of the population which they could hold were development to be possible on a reasonable scale. The States naturally hesitate to allow unlimited immigration, for fear of the influx of elements politically dangerous and hard to control. Foreign capital also has been found to have its dangers¹ to the free independence of the State. How can we facilitate the adequate development of such vast areas as the Amazon basin with the highlands of the Matto Grosso, capable of supporting a large European population, and possessing possibly large mineral resources? The Guianas and the Orinoco also offer great scope for development, mineral, forest and agricultural. How can we open these to the benefit of all without harming the legitimate interest of the States concerned? The distrust of the small States for the foreign capitalist is now matched by the distrust of the capitalist for the States. While the fall in prices has made impossible the regular payment of interest on the loans — of which a far too great proportion was contracted at too high a rate of interest, and, moreover, spent too often on unproductive objects — the capitalist may well hesitate to make further investments. Direct investment is now required in countries already regarded as bad investments; while, in addition, the capitalist has now to fear the confiscation of his property, if it seems attractive to a predatory government. How can these conflicts be reconciled?

The existing position is that there may be mutual suspicion or at least doubt. If, however, the United States and the British Commonwealth were to promote a powerful World Development Authority, possessing economic connections with many governments, but controlled by no single government, there

¹ *E.g.* Nazi control of air lines in South America.

would be a third party to hold the ring, — a kind of public economic trustee. It might thus be possible to reconcile the need of the capitalist for security for his investments with the desire of the States, in which development work was to be undertaken, for some guarantee against particular political penetration.

It is possible also that the organisation of a World Development Authority might serve another useful purpose. The Hawley-Smoot Tariff expressed the view of many Americans that their exports should not be paid for by imports of manufactured goods, other than restricted categories of luxuries such as whisky, fine cloth, etc. As imports of otherwise unobtainable raw materials and items of services did not suffice to meet the bill, the international balances had necessarily to be paid in gold ; and this has been responsible for a large proportion of the accumulation of gold in the United States. If the latter, however, were to participate in a World Development Authority, its citizens, through that body, would themselves become producers abroad of manufactured goods ; and they might in time come to see the absurdity, apart from the disadvantage, of denying them entry into their own country in reasonable measure. This might prove to be a powerful reinforcement of Mr. Cordell Hull's famous trade agreement policy ; for " the general opinion (in America) does not perhaps embrace all the details of Mr. Hull's views. It certainly does not go so far as to advocate, or believe possible, a general downward revision of the American tariff." ¹

B. A WORLD DEVELOPMENT AUTHORITY

The problem of Regional Development, which we have been led to discuss, at once suggests the question whether some kind of World Development Authority should and could be built up, to deal with problems that could not be handled, or handled only, by the Imperial Development Authority as such.

Before dealing specifically with the latter, to which all that we have written leads up, we propose to set out a few tentative ideas about a World Development Authority, as it might eventually become. The Imperial Development Authority could not give of its best unless it could work with other national

¹ Geoffrey Crowther, " Anglo-American Pitfalls ", in *Foreign Affairs*, Oct. 1941.

development authorities willing to cooperate with it. We have seen how it is usually impossible to solve a problem satisfactorily in one Colony, or one country, without taking into consideration the whole connected geographical region. We must try to learn to regard our entire world as simply one such vast, interconnected region. The Imperial Authority is simply one step — a step which we ourselves can take — towards world cooperation. Another greater Authority will be required, which we will call the World Development Authority, following essentially the same methods, and inspired with the same ideals as our Imperial Authority, but on the international plane. It might, perhaps, be possible to get the immediate cooperation of all our Allies in the formation of such a World Development Authority, without waiting for the end of the war. The close economic cooperation of the United States in such a scheme might well be of very great influence in the winning of that war. All other nations who were willing to subscribe to the aims and ideals of the Authority, and who would join at once, would be welcomed ; and, indeed, every effort should be made to enlarge the scope to the utmost.

We may, perhaps, venture to make some tentative suggestions as to the work which such an Authority might undertake. We are deeply sensible of our own inadequate knowledge and of the extreme difficulty of making any concrete suggestions, as well as of the great delicacy of the situation, the magnitude of the problems involved, and the utterly untried nature of every idea which we have to propose. But we do feel also that no thought can be crystallised, no scheme can ever be worked out, unless somebody — somewhere — ventures to think in concrete terms.

The choice of a site for the home of the World Development Authority will be of the utmost importance ; and we would suggest that a site should be chosen somewhere close to the Americas, where the great influence of the United States would be felt to the full, and where, also, it would not be so hard for the individual American to feel an interest in the work. To locate it anywhere in Europe would gravely prejudice the chances of getting the cooperation of the United States. If it were possible to arrange it, a good plan might be to purchase some 5000 square miles for the Authority in the Republic of Santo Domingo. The

interior of the island is almost uninhabited, mountainous and forest-covered, and rises to a height of over 10,000 feet. The World Authority could make a wonderland of such a territory. It would not be in the possession of any Great Power, would be under the protection of the United States, and yet would be independent. Access to the sea would have to be arranged, and the whole area developed in the most intelligent manner. The forests should be protected, the interest of the plains secured, and the watershed secured for ever from erosion and deforestation. Irrigation and water supplies could be worked out scientifically, and a model State constructed.

The work of the Authority would be similar to that which we have already described in connection with the Empire scheme, but the Authority would have functions of a different order in two directions, — those of International Investment and of Nationality.

Its primary purpose would be the application of capital to the development of resources and the increase of world wealth. The maintenance of international exchange equilibrium, and the emergence in the future of some form of international currency, depend primarily on the possibility of securing an underlying stability of conditions in the world at large. In a political and military sense, *ex hypothesi* the United Nations are pledged to ensure this. In an economic sense, it depends largely on the judicious investment of the Foreign Surpluses on the balance of payments of those nations, which possess surpluses. In other words, these surpluses need to be applied, by way of either direct investment or loan, to schemes that will produce future wealth, where resources lack development.

To realise this ideally, it would be essential for the nations to submit to a certain degree of economic discipline in the interests of world economy, so that there may be no waste of funds. They would learn to accommodate their economies to the stage of development which they had reached and to the general world economy. They could cooperate with all the more confidence, because the United Nations command the bulk of the world's visible supply of gold, and Great Britain might hypothecate to the common fund a proportion of the output of her gold mines.

The World Development Authority, representing the nations

united in goodwill, might become a convenient means of canalising these Foreign Surpluses and ensuring their application only to worthy objects. This might be the means, in time, of establishing conditions, in which international payments would be made smoothly, and an approach to exchange equilibrium maintained. It would be a development in line with existing tendencies, as marked by the Tripartite Agreement in 1936 between Great Britain, the United States and France. The machinery of the Bank for International Settlements (still in being) might come into service, and perhaps some form of international currency be ultimately evolved.

The Capital funds, represented by subscriptions in gold or in kind, as might be arranged, would be fixed possibly according to the national income of the State members, having regard to their balances of payments. A State might be allowed to take up more than its share, but not less than the sum which was agreed upon as being its due share in the world's work. It would receive ordinary shares for this subscription of capital, and would therefore have the rights of an ordinary shareholder. The Authority would also be enabled to issue Loans in the markets of the world. These might be taken up in part by the National Development Authorities, and in part guaranteed by such Authorities and issued to individuals.

Possibly the most difficult and distressing problem with which we shall have to deal at the end of the war, will be that of refugees and stateless persons. We suggest that an opportunity might be made of this difficulty to bring into being a "world nationality". The World Development Authority should set up the machinery to enable such persons to apply to it for "citizenship of the world". If his character and history were satisfactory, he should be given a passport which would be automatically valid for all States who were members of the Authority. It would give him the right to enter and travel and also to reside and work in all such States, so long as he did not become a charge on public funds. Where he was such a charge, the World Authority should assume responsibility for him.

We recognise that it would not be possible to grant such passports immediately to all those in Europe — or elsewhere — who wished to emigrate, but a start might be made with limited

numbers. Gradually, we should hope to see all countries open their doors to such persons as had the world passport for all purposes whatsoever. It might become a mark of honour and a coveted distinction. *Civis mundi sum*. Regulations could also be worked out for companies ; and such as were granted world registration should be allowed to enter and work in any member State of the Authority. This could be used in many ways to assist mutual trade.

But, if the Authority is to assume such a responsibility as that of the millions of stateless persons whom we imagine may be in need at the end of this war, it must have large areas of land to develop, large schemes for new homes and new work. Where can these be found ? To anybody who has thought about the present position it must be felt that, without a spirit of cooperation by all, no solution is possible ; but that, if all are willing to make their contribution, there is no real difficulty in finding the lands, and the money needed for developing them. The whole world would be the richer for their produce. For convenience' sake we may divide the possible development projects into two major classes, though, of course, in practice no really hard-and-fast lines can be drawn :

1. Reconstruction and redevelopment of old and developed countries.
2. (a) Development of new lands which offer scope for immigration.
(b) Development of new lands which do not offer much scope for immigration.

Under the first head will naturally come the problems of European reconstruction after the war. That must wait until we know what is left of Europe ; but any scheme will have to take geography into consideration if it is to have any hope of success. A peace settlement which separates natural markets from their natural source of supply is doomed to be a cause of strife. We must at least try to "lessen the economic importance of purely political boundaries". Under this head also would fall to be considered the development of China and the trade needs of Japan ; and here, as in India, we are confronted with the great difficulty of changing an old civilisation in a land also grown old. The problems of soil regeneration, reforestation, fuel supply

and flood control are all indissolubly linked with the even more difficult problem of control of human numbers.

It is, however, under the second head (section (a)) that the greatest immediate opportunities are to be found. There are still vast areas in the world which are under-populated and undeveloped, but which Governments hesitate to throw open to immigration. They are acutely sensible of the difficulties and dangers of the sudden influx of new peoples ; mixtures of races in lands already troubled with the difficulties of undigested peoples, not to mention the further dangers of unemployment and the expense of the new settlements.

We would suggest that possibly some of these difficulties might be lessened, if some areas were experimentally made available to controlled settlement by " World Citizens " and others, whom, though not eligible for such citizenship, the World Development Authority desired to assist. These would be drawn especially from the overcrowded areas of Europe, and for them the World Authority would assume entire financial responsibility. One such area lies around the southern shores of Hudson Bay and James Bay, where there is a great expanse of arable land. It is a hard and hostile land with a long, cold winter. But it might be habitable by many immigrants from Poland, Galicia and Ruthenia, for whom there is little hope in their own land. The base of their livelihood might be reindeer and the fish of the Hudson Bay. Crops of vegetables, rye, and perhaps oats, may be grown in the short summer, and there is a tremendous growth of forage. An experiment might be possible.

Other regions where the World Development Authority could function with advantage have already been referred to.¹ Development in the Guianas would be an experiment based upon the forest. Why should we not try to clothe more of the world in artificial silk ? We could grow less cotton, a crop which exhausts the soil, and in its place grow food and oil seeds, which would help the soil. Any development in the Matto Grosso region of Brazil would, be it noted, require the construction of great railways as a basis for the settlement of Europeans, and the due exploitation of its resources.

Under section (b) of the second head would fall to be con-

¹ Chapter V: Regional Developments.

sidered the scheme for West Africa, and for the region centring on Portuguese East Africa, both of which have been touched on in Chapter V.¹ The Santo Domingo area, alluded to above, would constitute rather a special case, but it would obviously be an ideal site for a magnificent Forest Institute.

Another type of special case would occur, where some kind of "easement" was desired in the territory of a country, for reasons other than those of internal development. We are thinking of the problem, brought into sharper relief by the need to find supply routes to Russia, of securing transport across Persia and Afghanistan; or of that older problem — the Manchurian Railway. These two countries might legitimately doubt the wisdom of allowing a neighbour to construct and operate a railway through their territory. The case would be quite different if the furnishing of such an "easement" were undertaken by an international organisation capable of satisfying the neighbour's need and of guaranteeing adherence to the conditions of the grant.

It is the international character of the World Development Authority that would render its formation in so many cases both necessary and useful.

¹ Chapter V, § 3: Other Regions in Africa and South America.

CHAPTER VI

AN IMPERIAL DEVELOPMENT AUTHORITY

A. THE ORGANISATION OF THE AUTHORITY

AFTER glancing at the principles on which, in our view, true democracy must function in any period of reconstruction, we gave reasons for thinking that, with a practical aim in view, to alleviate the poverty of the world is the most immediate necessity, and that the reconditioning of agriculture is the proper initial problem to attack. To avoid the theoretical discussion of reconstruction problems, we plunged at once into the particular practical problem of a British Colony ; and in discussing it we suggested the method most suited, in our view, to the circumstances, namely, to proceed through the medium of a Development Authority.

As we have already indicated, we very soon realised that, if this was the right method in one case, it should probably be applied to other Colonies. As, however, these are at various stages of development, the form it would take would vary with individual requirements. It needed no great step to see that a number of different Authorities, operating throughout the Empire, would necessitate some kind of parent Authority to coordinate their activities. The problems are wide, even world-wide, and the great undertakings involved would necessitate close coordination. Moreover — and this is, in our view, a matter of primary importance — the fundamental prerequisite in the work of effective development is knowledge, and this presupposes a system of survey, research and experiment which must necessarily be largely centralised. This would obviously be a principal function of the parent Authority. And so the idea of an Imperial Development Authority was born. That the facts and logic quickly begot the further idea of a World Development Authority has already been made clear, and some suggestions on the subject have been made. Here, however, we are concerned with the first-born.

Our proposed Imperial Development Authority is not to be regarded as the perfect and final type of organisation, but rather as an indication of the kind of method which we think would best be able to tackle the practical problems with which we are faced. The general aim is to find means to achieve a momentum of production in our Colonies, at home, in our Commonwealth and, if possible, throughout the world on a greater scale, and over a wider extent than the wit of man has yet conceived ; ensuring withal the maximum of stability and equality of opportunity.

But why, it may be asked, cannot existing instruments of Government be employed ? Is it necessary to create yet another weapon of administration with which to goad the harassed citizen ? The work which we have in view must of necessity be based upon a long-range programme. Such work to succeed must be impartially conceived and efficiently performed in the interests of the community as a whole, and to this end should, we feel, be removed as far as is practicable from the ordinary trammels of administration and the arena of party conflict, however healthy.

Civil servants, with the great growth of legislation in recent years, have more than enough to do in the administration of the laws made by Parliament, — the translation into executive arrangements of the policies laid down by responsible Ministers. Those Ministers themselves have the general duty of keeping under constant survey the existing framework of Government as it affects the citizen and the community. In the days of *laissez-faire*, the concern of Government in social and economic matters was strictly limited. In recent years, however (and the tendency has been greatly enhanced by two major wars), the extent to which Government has been compelled to intervene in the social and economic field has increased out of all proportion to the ability of the existing administrative organisation to deal with it adequately. This is due not merely to physical limitations, but also to the emergence of a new factor — the need for constructive planning on a large scale and in relation to a great variety of activities. Ministers have not the time nor civil servants the specialised training to grasp all the threads and weave them into a coherent pattern in the social and economic fabric. Moreover,

the art of administration on established lines requires a type of mind amenable to routine, to the day-to-day working-out and intelligent adaptation of the powers conferred by Parliament. But the business of developing resources, human and material, demands a different type of mind, one capable of comprehending a wide subject-matter and creating therefrom something new. The two types are rarely combined, and Ministers, with whom rests all responsibility in the last resort, need, therefore, the help of both types, — the one to plan and carry out in the long term development of unused resources, the other, as efficient executives, to administer in the short term the developed field.

But there are other reasons why, in our view, a specialised organisation for development, integrated with the machinery of Government, is a vital necessity. Such long-range work of development must inevitably yield in many cases only slow returns in the domain, for instance, of forestry, communications, etc. ; and in certain cases no returns at all *in the commercial* sense, where conservation, research and experiment are concerned. There must be a degree, and a very large degree, of immediate sacrifice with a view to future social and economic gain. No purely private development company could possibly shoulder so much responsibility. At the same time, direct investment, contrasted with loan investment, has many great advantages for the end in view, but is not suitable for operation directly by a Government Department.

Our conception, therefore, is of an Authority supported by and supporting the Government, *whatever its political complexion*, backed by Government credit and controlled in its general policies by Parliament ; but with the *format* of a commercial concern absorbed in the cultivation of its subject-matter *on its merits* for the good, not of a vested interest, but of the whole community, while possessing the freedom of initiative and flexibility of the efficient commercial concern.

There is one condition, and that is that such an Authority must be conceived and must operate within the framework of our present institutions, or rather of a freer and fuller democracy than we possess at present. The full theory of Socialism must be as foreign to its counsels as the complete practice of dictatorship in whatever guise. Those who organise it may, indeed must,

borrow the best ideas from these or from any other political creed, so that it may become the middle way between the competing ideologies of our day.

That, briefly, is the background, "the cloudy atmosphere", which we envisage for an Imperial Development Authority. Its problems are world-wide in their implications, and must be studied and dealt with *sub specie mundi*. Its operations are necessarily limited in their initial impact to the sphere of the British Commonwealth of Nations. But the world's troubles are, as Professor Staley has clearly shown, so largely due to the fact that the world's modern oneness in knowledge and scientific achievement has outrun its political, economic and social organisation, that every problem tackled by the Authority would have its repercussions in the rest of the world. But the wide extent and influence of the British Commonwealth of Nations provides a unique opportunity to give the world a lead. The British Commonwealth can impinge upon the conscience of the rest of mankind through persuasion and example, but example must come first.

Thus we come to the Imperial Development Authority, and we have to face the task of coming down to detail, fully conscious of its difficulty, and rather throwing out a series of suggestions than elaborating an uncompromising structure. The aim, as we have said, is to get a considered long-range programme put into practice, subject to the general control of Parliament within the province of H.M. Government in the United Kingdom, but in the substance and continuity of its detail unhampered by, and not compromising, the Government of the day. The operative control must be free from the influence of pressure-groups, and free in its aims as being in some sort the economic agent of the Government, but clothed with a proper responsibility and initiative of its own.

The Authority would have its Head Office in London, including the Secretariat, the Research Department and the Information Bureau. The two latter we regard as among the most important items in its constitution. Nothing is more to be remarked today in formulating plans for economic research and development than the lack of organised and coordinated knowledge. It is futile to found policy, or even expedients, on half

the facts or on opinion. Government and the Authority, so far as is humanly possible, must *know*. The Bureau should become the "thinking card-index" of economic knowledge, and the records should become more widely and readily accessible. It would be a function of the Bureau to remark gaps in our knowledge on lines similar to those on which the Agricultural Research Council works. The latter, together perhaps with the Institute of Economic Research, would become a constituent element in the organisation to advise the Research Department.

Turning to the all-important question of finance, this should, we suggest, be provided in part by ordinary shares, and in part by power to issue loans up to a maximum sum over a period of years. The capital would be found primarily by His Majesty's Government in the United Kingdom by means of a Capital Levy,¹ while the loans would carry Government guarantee as to interest and principal. A special Charter would be drawn up and a programme of finance laid down covering fifty years, with

¹ In addition to the Capital Levy, it is contemplated that an Inheritance Tax should be imposed. For the purpose of our discussion we are thinking of the variant of the Rignano scheme proposed by Dr. Dalton and Mr. H. D. (now Sir Hubert) Henderson. This is the "alternative version" referred to in the following quotation from Mr. Geoffrey Crowther's *Economics for Democrats*, which gives a general indication of the principles contained in the proposal:

"If the inequality of income is to be diminished by taxation on inheritance, then the rates of duty will have to be very considerably increased. . . . A method of collecting death duties has been suggested which, I believe, overcomes these difficulties. . . . If it could be provided that a man could leave the greater part of his fortune to his children, and that a substantial portion of it should be passed on to his grandchildren, but very little to his great-grandchildren, and none at all to his great-great-grandchildren, a large part of the evil of inherited inequality would be swept away without diminishing the incentive to men of energy and enterprise to make as much money as they can. The proposal is that, when a man, A, dies and leaves his property to his son, B, in addition to death duties levied as at present, a further sum, perhaps equal to the first, should be paid to the state, but not until B's death. An alternative version is that, on A's death, two death duties should be charged, but that the second portion should bear interest during the lifetime of B.

" . . . if the rates of duty are going to be materially increased, the state will have to accept payment in means other than cash. . . .

"But I do not think the state need be very frightened of accepting payment in kind . . . there seems to be no good reason why the state should not . . . form . . . trusts to administer, in complete independence, property belonging to it. . . . In this way the state would gradually acquire title to what may be called the excess property of the very rich. . . .

"I believe that some such plan as this, if it were carefully thought out and prudently administered, would be the means of achieving a substantial reduction in the present inequality of wealth, without (and here it differs vitally from other schemes for reducing inequality) having any harmful effects . . . on Efficiency. . . ."

sufficient provision for continuity and security of operation, coupled with adequate latitude within the programme.

The Government, being the majority (or sole) shareholder¹ so far as this country is concerned, would have the right to nominate the Chairman and half at least of the Board of Directors, who might be ten in number for Great Britain, and who, after three years, would retire one each year successively, and would be subject to the ordinary regulations of limited companies.²

The Authority, when formed as the result of the activities of the "Exploration" Research and Development Company — about which more anon — would be concerned in the first instance with :

- (a) Development in Great Britain through a Home Development Authority.
- (b) Development in the various Colonies through such Colonial Development Authorities as might be set up.
- (c) Such Development as might be initiated in the appropriate manner in—
 - (i) the Dominions, if the cooperation of the Mother Country was desired.
 - (ii) India and Burma, if such cooperation was mutually agreed upon.
 - (iii) Associated friendly States : *e.g.* Egypt, Iraq, etc., where the required treatment was the most appropriate line of action.
- (d) Development in foreign countries : *e.g.* Europe, where initiated *e.g.* through the World Development Authority, for which purpose the Imperial Development Authority would operate through its Foreign Department in liaison with other countries, the United States, Russia, and all other countries of "good-will".
- (e) Through its Secretariat and Bureau (the successor to the "Exploration" Company) coordination of all its activities.
- (f) Creation of a department of Survey, Research and Experiment, to absorb the multifarious bodies now existing and to fill gaps, and also to maintain liaison with the research departments of subsidiary Authorities.

It is clear that at certain points, to some extent from the start and probably increasingly as time went on, matters of interest to

¹ See Chapter VI, B. This depends upon the scheme of Finance adopted.

² See below, p. 149.

envisaged, would have a highly important influence on the internal character of the latter. The status of the Directors should come to be regarded as one of the greatest dignity, and the same convention should apply to them as to Ministers of the Crown, namely, that they should not hold positions on the Boards of other Companies. It would probably also be desirable that, with the exception of the Chairman and Vice-Chairman, they should not sit in Parliament.

We like to think that in the Authority a spirit of service would grow up comparable with that which animates the Services, Military and Civil, and it should be one of the aims of the Directors to foster this spirit. On the other hand, it is essential that they should encourage initiative and efficiency in members of the staff, and promotion should be as far as possible by merit. A list of the officers of the Authority should be published annually, with remarks and records of special services. Adequate salaries should be paid to attract first-rate talent, and, if any member of the staff was in any way related to a member of the Board, this fact should be stated in the Report.

Special relations would also, of course, be developed with existing Government Departments. What these would be or should become it is difficult in a general discussion to define in detail. Generally speaking, Government Departments in the last half-century or so have, in the exercise of the administrative function, developed a restrictive role. In recent years, however, the urgency of social and economic problems, and the stress of war, have superimposed upon their administrative duties the obligation to devise the machinery of constructive activity. Individual officers of first-rate ability have, as we should expect, in a large measure risen to the occasion.

But the business of social and economic development has inevitably been treated piecemeal by a body of men whom it was hardly fair to ask to combine the duties of administration with the necessity of working out and operating a coherent scheme of social and economic development. The results, often pitiful and sometimes disastrous, are plain to see in the Colonial Empire.

That is why, in our view, all the threads, investigational and executive, of the economic development, for which His Majesty's Government in the United Kingdom is responsible, should be

gathered into the hands of a well-organised body on the lines of our suggested Authority. The whole effort, properly articulated, needs to be lifted on to a totally different plane of activity, and operated on a scale as greatly transcending the present as the Himalayas over-top the Pennines. It must be a great constructive effort at controlled development and reconstruction ; guided by the best information that science can give and backed by the whole energy and financial strength of our people.

B. SUGGESTIONS CONCERNING FINANCE

No completed scheme of finance could be presented until such a Development Authority had reached a stage of much greater definition in detail. But we have thought it well to make an attempt to show that financial arrangements were possible, and also to indicate the order of magnitude of the sums which would be involved in such controlled development. We prefer the schemes which are here given, but we are quite alive to the fact that many other schemes could be propounded, each with peculiar advantages and disadvantages of its own. All we wish to do is to illustrate one out of various feasible methods of finance, which seems to us to have many points to recommend it. The following suggestions are based to some extent on material contained in the *Report of the Committee on National Debt and Taxation* (1927, cmd. 2800), commonly known as the "Colwyn Committee Report" ; and the references are to that Report. The Inheritance Plan that we should like to see put into effect would provide for the imposition of double death duties, on the second portion of which interest would be paid by the State during the lifetime of the first heir (*vide* p. 146, note on Inheritance Plan).

SCHEME I

A Capital Levy of £3000 million to be raised at the end of the war roughly on the scale as given in the "Colwyn Committee Report", p. 252, Scale 1.

Method

- (a) Shares in the Imperial Development Authority to be issued to those who pay the Capital Levy ; £1 for every £ which

they pay. His Majesty's Government will receive, free of cost, the same number of shares as are issued to private individuals, plus 1 share. The shares of the State are not to be saleable, and will have no right to any dividend, but their voting rights will be the same as shares privately held. Additional shares may be created for the Dominions, to rank as Government shares.

Dividends to be limited to a maximum of 4 per cent. Shares in the Authority are not to be subject to the operation of the Inheritance Plan for a hundred years. (Naturally, the State shares are not affected.)

- (b) Preference shares to be issued to the same value as payments, and dividends on these shares are to be a guaranteed 2 per cent and no more. They would have no voting rights. To His Majesty's Government would be issued 100 Ordinary shares, and each self-governing Dominion would have one share as of right; this would give them the right to subscribe to the subsidiary Authorities if they so desired.

The Preference shares would not be subject to the operation of the Inheritance Plan for a hundred years.

- (c) A straightforward Capital Levy with no Ordinary or Preference shares except the Government shares as in Method (b). In this case interest at 3 per cent to be paid on capital levied as to $\frac{3}{8}$ for the first two years, as to $\frac{3}{6}$ for the third year, as to $\frac{3}{8}$ for the fourth year and so on till interest ceases in thirty years. The Inheritance Plan not to be put into operation for thirty years.

SCHEME 2

A Capital Levy on Scale 2 (p. 252), to provide £1000 million. This would be followed by loans guaranteed by the State to a maximum of £2000 million in ten years.

The £1000 million is the initial capital of the Authority, and includes an allowance for a subscription of £500 million to the World Development Authority. This could be a direct levy once paid and done with, or could be worked on the Methods (a), (b) or (c) as desired; but if Method (c) were chosen, the interest payments should cease in ten years and the Inheritance Plan would then come into operation.

This would, of course, present less disturbance of values and

habits in every way. It would also have less effect on taxation, and normal savings and employment. It would not give the same assurance of non-repetition, but would give greater control to the Government who indirectly control the loans. The Board would certainly have a greater feeling of independence with invested funds of the Scheme 1 magnitude.

Under all three methods and under both schemes, an investment trust would be formed to take charge of subscriptions. Payments could be made in cash, in Government Loans, or in any stocks or shares, debentures or bonds quoted on any recognised Stock Exchange in Great Britain. They could also be made in approved mortgages on land, or in land itself, or in shares in "Land Companies". To avoid the break-up of large estates, which we believe to be undesirable, owners of such could form themselves into Limited Companies, and the shares of such Companies, where approved by the Trust, could be ceded in payment. Such subscriptions, however, would not be acceptable for sums of less than £3000 under Scale 1, or £1000 under Scale 2. By this means the effect on the Stock Exchanges would be minimised, as the greater part of the subscriptions would be retained as permanent investments by the Trust, and such as were sold would be liquidated very gradually and over a long period of time. To raise cash, the Authority, or the Trust if it had payments to make and did not wish to disturb its investments, would be empowered to issue Debentures and Loans to a maximum of £200 million per annum, which would be guaranteed by His Majesty's Government; but for the payment of interest on which the income from the investments of the Trust would be available, as well as the income from the developments themselves, as they became paying. This contemplates a total expenditure of the order of £200 million per annum, allocated roughly as shown on next page.

This might represent approximately an overall yield after a period of, say, thirty years of some 3 per cent on the whole investments on development works. Besides this sum of £200 million there is the sum of £50 million per annum which is earmarked for the World Development Authority. This would be slow to yield revenue, but being managed on the same ideas

	(Figures in £ million)
H.Q. Administration, Information Bureau . . .	10
Scientific research at Home	10
Scientific research on Imperial Problems	10
Special Grants not expected to yield direct revenue . . .	10
Home Developments from which a small revenue is expected	40
Home Developments from which considerable revenue is expected	40
Imperial Developments (small revenue)	40
Imperial Developments (larger revenue producers) . . .	40
	£200

	Total Expectations, £ million
£40 million at nil
£80 million at $2\frac{1}{2}\%$	2
£80 million at 5%	4
	£6

should pay small dividends in time. It is shown later how this might work in detail.

It is now possible to consider the working of the Scheme.

SCHEME I

This is unaffected whichever method is adopted. Capital receipts, £3000 million in cash or kind. This is immediately taken over to be administered by the Investment Trust. It is assumed that £200 million is to be issued in Loans, Debentures or in credits, as decided by circumstances, annually; and it is now possible to try to imagine what might be the position at the end of a period of ten years. Assuming that £1000 million of cash and kind have been liquidated and spent as cash in these ten years, this includes £500 million for the World Development Authority and £500 million for the initial works of the Imperial Development Authority. The early post-war years should be the most expensive if the preparation has been made before the end of the war and work can begin at once. The Investment

Trust would then have £2000 million of investments left, and Loans, etc., for £2000 million would have been issued in the ten years. So, at the end of the ten years, £2500 million should have been spent on Imperial Developments, and £500 million would have been spent by the World Development Authority on World Developments. This money could be transferred from Imperial Development Authority to World Development Authority in many ways ; in exports of capital goods for which shares had been allotted, or in newly mined gold bought and earmarked for the World Development Authority.

It is, of course, quite impossible to estimate now what would be the rates of interest for a period of fifty years, but in order to show how the scheme would work, some figures must be taken. It may, perhaps, be reasonably assumed that the Authority, with the support of an Investment Trust with such large investments and with a Government guarantee of all its loans, would be able to raise cash on the market at a rate on the average at least 1 per cent less than the Trust could earn on its invested funds. Figures have, therefore, been taken in illustration as follows : 3 per cent as cost of loans and 4 per cent as rate of interest which it earns on its investments. The calculations are not invalidated if other rates are taken ; what is important is the 1 per cent margin between the rate of issue and rate of earnings. This seems to be not unreasonable. The direct income from the developments also, of course, is expected to be considerable when they have had time to be brought to fruition ; but in ten years, naturally only a small proportion of these will be bringing in a return.

The Investment Trust will also be in charge of the administration of the Inheritance Plan. As a Capital Levy has been taken, naturally there will be smaller amounts to be paid in on the Inheritance Plan. It is not fair that shares which have been issued in return for Capital Levy payments should be brought under the Inheritance Plan. They are already making their contribution to the national effort ; their owners have been asked to make a great sacrifice and some return is warranted. But to exclude them in perpetuity from the operation of the Inheritance scheme would only create a new problem of inequity at a future date. Therefore they have been excluded for a definite and long period. This would at once give a greater feeling of security to

the holders than perpetual exclusion, and would obviate a great problem which is clearly certain to crop up one day. But it is therefore necessary to reduce the probable yield of the Inheritance Plan by a considerable amount, and to put the yield at £60 million per annum instead of £80 million as originally estimated. So, after ten years the Trust will have the sum of £600 million invested under the Inheritance Plan, bearing life interest at their borrowing rate, say 3 per cent.

INCOME AT THE END OF TEN YEARS

	(Figures in £ million)
Spent on developments, £2500 million, on which we will estimate a net yield of 1 per cent	£25
Invested Funds, £2000 million, on which we estimate an income of 4 per cent	80
Income from invested reserves as below at 4 per cent . .	20
	£125
Interest on Loans, etc., due annually at 3 per cent .	£60
Balance in hand, £65 million	

On the Inheritance Fund the Annuities would amount to £18 million at 3 per cent and the income at 4 per cent would be £24 million.

Reserve

In these first ten years the Investment Trust will have a non-recurring source of revenue which will enable it to build up a considerable reserve. It will have £2000 million invested, but the Authority will not be issuing all its loans at once. It only anticipates issuing £200 million per annum. So we get the position shown in table on p. 157.

Further, there would be some income from the £1000 million to be liquidated during the first years to provide the capital for the World Development Authority and the initial capital for the Imperial Development Authority. For the sake of argument, a net total "profit" might be supposed of £500 million in the first ten years, which will represent a reserve to be invested by the Investment Trust.

Year	(Figures in £ million)		
	Loan actually Issued	Interest due at 3 per cent	Income at 4 per cent on £2000
1st	£200	£6	£80 balance = £74
2nd	400	12	" = 68
3rd	600	18	" = 62
4th	800	24	" = 56
5th	1000	30	" = 50
6th	1200	36	" = 44
7th	1400	42	" = 38
8th	1600	48	" = 32
9th	1800	54	" = 26
10th	2000	60	" = 20
			Total . £470

At the end of the first ten years, the Authority is, therefore, in hand — over and above its expenditures on Loan interest — by £65 million per annum, or £40 million without any income from its developments at all. It will have enormous developments which are gradually coming to fruition, and with the guarantee of the Government and its own standing, can continue its policy of regular capital issues each year.

As a matter of pure speculation, the figures would proceed as follows : at the end of the second ten-year period, the Authority would have spent on developments £3000 million (£2500 million Imperial Development Authority and £500 million World Development Authority), plus £200 million a year for ten years ; no further subsidy would be paid to the World Development Authority under this scheme as it would be following a similar plan of Loans.

	£ million
Income from investments and reserves	£100
" " 1st 10-year developments at 2 per cent	50
" " 2nd " £2000 million at 1%	20
" to be expected from W.D.A., £500 million at 1%	5
	<u>£175</u>
Interest due on Loans, £4000 million at 3 per cent, £120 million	

At the end of the third ten-year period the estimate is :

	£ million
Income from investments and reserves	£100
" " 1st 10-year developments at 3 per cent	75
" " 2nd " " " 2 "	40
" " 3rd " " " 1 "	20
" we may expect from the W.D.A. " 2 "	10
	<u>£245</u>
Interest due on Loans, £6000 million at 3 per cent, £180 million	

At the end of the fourth ten-year period the estimate is :

	£ million
Income from investments and reserves	£100
" " 1st 10-year developments at 3 per cent	75
" " 2nd " " " 3 "	60
" " 3rd " " " 2 "	40
" " 4th " " " 1 "	20
" we may expect from the W.D.A. " 3 "	15
	<u>£310</u>
Interest due on Loans, £8000 million at 3 per cent, £240 million	

At the end of the fifth ten-year period the estimate is :

	£ million
Income from investments and reserves	£100
" " 1st 10-year developments at 3 per cent	75
" " 2nd " " " 3 "	60
" " 3rd " " " 3 "	60
" " 4th " " " 2 "	40
" " 5th " " " 1 "	20
" we may expect from W.D.A. " 3 "	15
	<u>£370</u>
Interest due on Loans, £10,000 million at 3 per cent, £300 million	

Of course these figures must be regarded as wildly speculative

but as illustrating a method they are not perhaps unrealistic. The net yield is shown to be of the order of 2 per cent, and the World Development Authority has been shown as giving a yield of 3 per cent. It would, perhaps, be able to get a larger yield as it will not have to spend much on research, or grants which show no return, etc. It will be a more purely development and business concern. Stabilisation loans, etc., will also be in its province, and a revived Bank for International Settlements, — perhaps a currency based on the surplus gold of the United States, etc. Actually the limit of profits might not be 2 per cent, for, as the big irrigation works, the forests, etc., come into production, the yield might well be greater ; but the object here is, not to forecast large returns, but to show that a method of finance is feasible. Any scheme for the finance of such a Development Authority must needs include certain elements of the following :

- (a) Mobilisation of existing capital resources and their diversion to the uses of the Authority.
- (b) A draft on a proportion of the new savings which are continually being made.
- (c) Creation of Bank credit.
- (d) Employment of resources now under-employed.
- (e) Taxation.

The problem is to combine the mixture in the correct proportions, and these proportions cannot be laid down in advance ; they will have to depend on the circumstances of the moment. The mixture will have to be varied, and will have to be the subject of constant study and of close cooperation between the Authority, the Investment Trust and the Government.

With regard to point (a) the Authority must be able to justify this diversion on the following grounds : first, that the use to which the money is to be put is socially and economically superior. It is essentially the same problem which the first men to domesticate cattle or sheep had to decide. The more backward members of the family would always want to know — “ Why not eat it now and save trouble ? ” Secondly, on the ground that it will create more employment and wealth than at present. Where, again (as in point (b)), the Authority is in competition with other capital-users, it will have to justify its existence in the same way, and the competition must not be forced or inflation

will result. As regards (c), new resources must be created ; therefore, in order to bring into play the reserves of unused labour and machinery, a certain use of Bank credit can be made. How much, is a matter for the experience of the future to decide. A full use of all resources must be aimed at, and this applies to point (d). As regards (e), a certain element of taxation must enter all such schemes for the diversion of capital. If we do it by State Loans, then the interest must be found by taxation, or by not remitting taxation when a surplus might appear. So, also, when we raise a Capital Levy, we are reducing the amount on which Income Tax is to be paid, and that will necessitate savings and taxation of some kind. Method (b) would mean less disturbance than Method (a) in this way.

It is because the difficulty of these questions is fully realised that a preliminary Research and Development Company — a sort of " pilot plant " — should be formed to study the best way to attack the whole idea.

The Capital Levy

It remains to consider a few points in detail as to the Capital Levy, discussed fully in the *Colwyn Committee Majority Report* in para. 707 and subsequent paragraphs.

The Colwyn Committee were agreed that in general a levy was practicable, provided that the moment was well chosen. The end of the present war would probably be a good moment, when opinion in favour of big schemes to develop the whole economy might be well received. It would also be justified on the ground of help to the demobilised.

The intention of the schemes examined by the Committee was to save interest on the National Debt. The aim of our scheme, on the contrary, is to increase the total production, so that the relative incidence of the Debt charge would be lessened. The saving of interest on the National Debt, if the levy were applied to its reduction, would really be relatively small. If, however, the Levy were used to increase the total wealth, this might prove to give far more effective relief.

It has always been foreseen that one of the chief difficulties in the way of the Capital Levy is the impossibility, constitutionally, of giving any absolute guarantee against a repetition of the

Levy, such as occurred in Italy. A large Levy is, perhaps, a better guarantee than one on Scale 2 ; but, as it would be for the special purpose of forming the Authority, perhaps that would give something of the feeling of security needed. Capital, however, can always be enlarged !

The direct effect of our scheme on the value of securities would be small, as there would only be comparatively small sales, very slowly effected. The actual sales would certainly be less than if the Levy were to be used for direct reduction of the National Debt. A big sum of capital is, however, being put into " strong hands ", and will be withdrawn from the market. This would have effects very hard to appraise. That is why, if the larger, £3000 million, scale is adopted, we have suggested that shares might be created, as these are a marketable asset. If, on the other hand, they were expected to receive a fixed 2 per cent as in Method 2, they would probably sell at around 55-60, or perhaps a little more, if it is possible to assess the value which would be put on their proposed exclusion from the Inheritance scheme. The income from these securities would also be withdrawn, and that will have an effect on the Exchanges and on employment. There will be what is equivalent to a forced saving here. This would be re-invested by the Investment Trust. It would then in part withdraw other stocks from the Exchanges, and when used for investment in " developments ", *e.g.* Colonial railways, ports, etc., would mean capital goods instead of consumption goods, at least in part.

As to the suggestion that confidence in the stability of Government finance might be affected by the introduction of a Capital Levy, it is difficult to express an opinion ; but it would, perhaps, be felt that the Government is showing great courage and imagination in its novel attack on old difficulties. It would get considerable credit for this, and confidence should at least not be adversely affected.

The Committee discuss at some length the possible effect of the Levy in causing a restriction of credit. They thought that this could be exaggerated, but that some might occur if the higher Scale 1¹ is adopted. In that event, steps would no doubt be taken to replace any credits withdrawn. With Scale 2, such

¹ See section (2) of the discussion in the Report.

restriction would be negligible. These considerations apply both to cases where bank credit might become restricted and also to the cases where resources in private business were inadequate to pay the Levy and to carry on.

In the case of agricultural land, considerable flexibility could be achieved by allowing large sums to be paid in land or in shares in land companies, as suggested in the text. These would then be used either for forest works or for agricultural reconstruction.

The Committee recognised that it would be very difficult to estimate the redistribution of saving power likely to be effected by the Levy. The whole thing would depend on timing and propaganda well devised and pushed on a National scale ; it would in reality be necessary to arouse the enthusiasm of the whole world. The end of the war is, of course, the moment.

C. AN "EXPLORATION" COMPANY

By this time it is, of course, apparent that so large a reorganisation as we propose cannot come into being by fiat — ready-made and in working order. The various Authorities would need time in which to grow up. Nevertheless, at the conclusion of hostilities the need for action will be immediate and on a wide front. A period of transition will, in fact, be inevitable.

In all the schemes which we have proposed there necessarily exists a dual aspect — that of immediate post-war reconstruction and that of long-term development ; and this duality might possibly be used to provide the stepping-stones which we need to pass over from war to peace-time organisation.

In the Colonial sphere, the Colonial Welfare and Development Act, 1940, with its larger resources continuing the work of the Colonial Development Fund, exists for just the kind of developments which we have in mind. But, as we have tried to show, in view of the immensity of the task, its scope is diminutive. We suggest that, deriving from this Act, a separate organisation could be formed, and could start work now on the preparation of the groundwork for intensive Colonial development at the end of the war. It could remain, for such time as seemed desirable, under the Secretary of State for the Colonies ; but, if it is to achieve the independent outlook which we believe to be so

necessary, it ought to be formed at once into an entity quite separate from all other departments of the Colonial Office. It should be autonomous, an Authority from the start.

It must be made clear that, in our view, these are only different aspects of problems which are in essence the same, but that at the end of a war such as the present there is an urgency about relief which makes Government a more suitable agency *pro tempore* than our Development Authorities. But the immediate short-term efforts would be doubled in their value if they were visualised as falling into a long-term scheme for human betterment.

The practical application of the Authority method would, moreover, provide in itself positive inspiration in the struggle with Hitler. On all hands — in these days — men are asking, "What do we want to do at the end of the war, and how are we to do it?" The Authority scheme, which we have suggested, would focus attention on the practical problems of reconstruction. The necessary preparatory discussion, which must be completed before reconstruction begins and must, therefore, be carried out during hostilities, would enable public opinion on the practical proposals to crystallise. In this way the Government could avoid becoming committed to any particular and detailed line of policy, based only on the widespread theoretical consideration which has been taking place. The study of reactions at home and abroad would be invaluable.

In preceding pages the *modus operandi* of the Imperial Development Authority has been sketched in. But, without detailed and expert examination, the feasibility of many of the ideas is unproven, for they are suggestions only. In any case, mere naïve enthusiasm would not enable the Authority to function with success. The most careful preparation would be needed before they could undertake large-scale works. If this groundwork were inadequate, much capital would be wasted, and the many difficulties and failures encountered would result in disappointment and in yet another lost opportunity. Study would be needed both of the actual schemes and of the political and constitutional questions involved. In particular the Charters of the Authorities¹ would need scrupulous care in drafting, and

¹ See p. 36.

the financial arrangements the most meticulous preparation, in order to give at the same time sufficient independence to the Boards of Directors, and to retain the final control in the hands of well-informed Parliaments and instructed public opinion. The foundations must be surely laid, for no mean task will await us at the end of this war, — nothing less than the conscious rebuilding of our whole civilisation. Whether we like it or not, this task will have to be undertaken ; the only question that we may now discuss is the correct technique. In this work the Authorities might well play a very important part.

Assuming that some scheme of controlled development, such as we have outlined, could be operated after the war, the preparatory work could not start too soon. And so, in order that this might begin immediately, we suggest the formation of a preliminary Company with an initial capital of £1 million ; to wit, a " Company for the study and preparation of reconstruction and development by the Authority method ". In brief, an " exploration company " should be formed to investigate, to recommend and to prepare the way. Large-scale action must needs be delayed until the war is won, but, unless the plans are well laid beforehand, we shall be unready to win the peace. This research company we envisage as in some sort the " pilot plant ", or the " prophet ", to get people accustomed to the novel ideas involved in the Authority method ; its prime aim to gather all necessary information so that the line of action may be clear when the time is ripe for getting to work.

We do not advise the formation of a Department or Ministry for this work, as both Governments and the Authorities would profit if we started at once to try to form the independent " Authority spirit ". There are clear advantages to be gained from a Company with a business point of view, and not subject to the important restrictions imposed on the Departments, or created by ordinary political life.

The particular tasks of this research or exploration Company would work out thus. We will assume that it has been decided to push development in the interests of a rising standard of living as soon as war needs will allow this to be done, and that it has been decided to do this by something approaching what we have called the Authority method.

- (1) The exploration Company will, therefore, begin by working out the more precise style of scheme to be adopted, and the constitution of the Imperial Development Authority. The finance will have to be considered, and the Charter drawn up for the consideration of the Government. The legislation wanted must be prepared and published for criticism and amendment; and generally a blue-print of the whole organisation must be formulated.
- (2) This will necessitate the collection, discussion and digestion of a great mass of material information. The situation likely to be encountered at the end of the war must be examined, and the needs of the demobilised men and the demobilised industries will have to be worked out. In particular the method whereby immediate relief works can be keyed into a long-term scheme will need the most careful preparation.
- (3) Schemes of development must be prepared and given detailed and expert examination. Their effects on employment in Britain and abroad must be estimated and an order of urgency prepared. All relevant data will need collection, and will comprise the needs of the Home population and of the Empire — and indeed of the whole world.
- (4) It will be found that, for the data required, much original research is wanted. This will take many forms, — economic enquiry at Home and in the Colonies, study of social necessities, the scientific study of agricultural systems and of soil requirements, to determine what we shall grow and where we shall grow it; a forecast of the needs of the populations in foods, and of industries in raw materials, and an enquiry into the best and most economic sources of supply.
- (5) The Company will try to get into the closest touch with the Colonial and Dominion Governments and with the Associated States. Here will come very necessary contacts with the local politicians, and much judgment will be needed to obtain the best results. We must find a way to rouse the same enthusiasm and the same unselfish mutual help in the cause of peace as has been given to us in the cause of war. We must appeal to the future, to the hopes of building a sounder, more fertile economy which will more than repair the damage that war, even victorious war, inevitably causes.

- (6) Finally the Company will be charged to get into touch with foreign Governments, more especially those of our Allies, and particularly the United States ; and to see how far cooperation will be possible. It should be a major objective to get this cooperation, and to get out the blue-prints of the World Development Authority as quickly as possible.

This last work will be of the utmost importance, and it is here that, probably, the very greatest advantage will be felt from the detachment of the Company from the British Government. The fact of its existence apart, will enable it to attempt work which the Government could only do with great difficulty. It is supported by the Government, to whom it will recommend policy, but it is not the Government, which is in no way committed by its word or actions. It is there to suggest, to study, to recommend ; not to take decisions. At the same time it is a responsible body, with considerable prestige and means. It has been given difficult and important work of an exploratory character to do, and it may be able to feel that, if its work is well done and its conclusions are well founded, there is very little doubt that the Government will follow the suggestions made. The very widest publicity should be arranged for its recommendations when these are made, but no undue haste must be expected. The closest contacts would have to be maintained between Government Departments and the Company ; and it is during the preliminary period of study that much invaluable experience will be gained as to the best methods to be followed when the large-scale Authority starts to work. This field of relations with the old-established Departments bristles with difficulties, but there is everything to be gained by sympathetic cooperation to the common good. The personalities of the first Directors will be of exceptional importance.

The Authority is to work in an undefined borderland between private industry and the individual, whom it exists to help on the one hand — and the activities of Government on the other. It is to attack problems which neither Government nor private enterprise have so far been able to solve. It is entering a new phase of our economic development, and has to evolve a new technique. But the need for new economic policy has been

everywhere recognised ; only the methods are really any longer in dispute. The methods we propose are well adapted to the British genius for team-work, gradual adaptation and compromise. Naturally many mistakes will be made ; but these methods are also flexible ones, and can change and grow with time. There is supremely difficult work before us, and we shall need all the help that science and forethought can give.

“ When the question is asked whether we want more state planning or more free enterprise, the only sensible answer is that we want a great deal more of both.”¹ There is a place for planning and order and a place for freedom, and work for both to do. Little attempt has hitherto been made to define their respective spheres of influence, if the common good is to be best served. We think of our Authority as an organisation which would help to make planning more effective and efficient.

¹ *The Economist*, Dec. 1940, p. 742.

THE FINAL WORD

So we come to the end of this study. We finish with the first practical necessity — the “ pilot plant ” ; but we had to begin with the logical and philosophical background, to show how the idea was born, how it might work out in practice, and what its implications are for the Empire and the world. What is that idea ? It is that mankind as a whole could be lifted on to a higher plane of well-being, of opportunity for happiness and personal development, if enough imagination and resolution were devoted to developing the material resources necessary to support such a new way of life. If this were achieved, mankind might find more peace and a greater interest in life than is possible under present conditions. But there would be need of knowledge, sympathy, effort, some sacrifice of the present for the future, and a willingness to work whole-heartedly with others for the intrinsic worthiness of the aim. If once the misery and evil bred by poverty, ignorance and political obstinacy were swept away, economic order and continuous effort could provide the means to attain an ever fuller and better way of life. But this would demand completely new ideas as to the task before authority ; something quite different. Above all it asks for an imaginative understanding of man’s needs and the world’s potentialities.

We are mindful of the difficulties, as we are conscious of the defects of our presentation. This is “ an ill-favoured thing, but our own ” ; an imperfect attempt to suggest a method, which might do two things : first, make people realise that a wholly new approach is needed ; and, secondly, show how great is the opportunity, how much there is to do that is worth the doing, for its own sake, and for the good that it may do to our fellows whom we wish to serve.

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